

MASSACHUSETTS BUREAU OF STATISTICS OF LABOR.

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# STATISTICS OF MANUFACTURES.

1903, 1904.

PART V OF THE ANNUAL REPORT FOR 1905.

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# STATISTICS OF MANUFACTURES. 1903, 1904.

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## Introduction.

The part herewith presented is the nineteenth of the series of annual reports on the industrial statistics of Massachusetts, issued in accordance with the provisions of Chapter 107 of the Revised Laws.

The data given in the succeeding pages include the returns from 4,730 establishments, each of which made report for the years 1903 and 1904.

By Act of Congress of March 6, 1902, the year 1905 was constituted a Census year, the reports for manufacturing establishments being made to cover the twelve months ending December 31, 1904, or the fiscal year nearest conforming to that period. This brought the Census year and the year for the regular collection of returns for Annual Statistics together, and by arrangement with the Bureau of the Census at Washington, one report was made to serve both purposes. It will be understood that returns were received from a very large number of establishments this year, but for the present abstract only those that were comparable with the reports for 1903 could be used. There were, therefore, selected from the Census returns the reports of all those establishments which made return for the annual comparison for 1903, 4,730 in number, and the present volume deals with the figures derived from these establishments. It is at once evident that it is not intended to cover the entire industrial field, but the product value represented by the Annual returns in any given year is about 90 per cent of the output of the State as determined by a Census. The publication of the full Census returns for 1905 will be made at a later date by the Bureau of the Census at Washington and the Massachusetts Bureau of Statistics of Labor, and while the returns will include a very much larger

number of establishments they will but serve to demonstrate the fact that the annual comparison of nearly 5,000 identical establishments is an excellent indication of the industrial situation from year to year.

It is true, also, that if the Census figures do not show material gain as compared with 1900, it will be because that year was particularly prosperous while the year 1904 was one of business depression in some large industries. The general assumption, in such case, would be that there was retrogression among the industries of the State. Yet the real facts, as borne out by the annual returns of representative establishments, point to steady growth for the intervening years, 1901, 1902, and 1903.

This first attempt in the line of co-operation, co-ordination, and unification in the collection of statistics of manufactures was attended by many difficulties. Unfortunately the schedule for the Federal Census could not be made on the same lines as those in use in Massachusetts, notably for the questions relating to Capital Invested and Persons Employed.

As is known to all acquainted with Massachusetts statistics, the object has been to gather statistics of capital *devoted to production*; whereas the United States government asks for capital invested, and includes in the total for capital a number of miscellaneous items which this Office does not consider a part of the capital that is used to produce goods. Therefore, the comparisons for capital have been omitted in this volume.

In regard to Persons Employed, Massachusetts has been accustomed to ask for adult males and females and for young persons, irrespective of sex, under 21 years of age, while the Federal government asks for men and women over 16 years of age and children under 16.

These two questions, and the inquiry relating to classified weekly wages, which is affected by the age limit for persons employed, were retained by the United States government for the reason that they had been in use in previous Censuses, and, in order to test the practicability of co-operation, Massachusetts for this year accepted the Census schedule.

It is evident, however, that, under this plan, comparisons are impossible. Until a uniform schedule is adopted in all the



States making an annual investigation, it will be a statistical impossibility to make any comparisons. Therefore, while the idea is a good one and ought to be supported if all parts of the work are uniform, it is not probable that Massachusetts will again enter into a system of co-operation which involves the abandonment of any of its previous methods of compilation and tabulation.

Readers of this annual part will recognize the difficulty which exists in making comparisons upon these three points, — Capital Invested, Persons Employed, and Classified Weekly Wages. Therefore, in the consideration of these tables we have omitted most of the comparisons.

The statistical tables are arranged under five section heads, with sufficient analyses to bring out the full character of the returns. They are as follows :

I. *Establishments and Their Management.* Under this head are presented the data relating to the management of the 4,730 establishments, showing the number of establishments controlled by private firms, by corporations, and by industrial combinations, together with the number of partners and stockholders interested therein.

II. *Investment, Materials Used, and Product.* This section covers the amount of capital devoted to production in 1903, and the amount of capital invested, as called for by the Census inquiry, for 1904; the cost value of stock and materials used; and the selling value of the goods made and work done.

III. *Labor and its Compensation.* Under this head are presented the average number of persons employed, with increase or decrease in numbers and percentages; the smallest, greatest, and average number of persons employed, both sexes; the range of employment and unemployment, as shown by the excess of greatest over smallest number of persons employed; the number of persons employed, both sexes, by months, with percentages of employment and unemployment for the nine leading industries; the total amount paid in wages during each of the years 1903 and 1904 together with the average yearly earnings per individual, without distinction as to sex or age; and the classified weekly wages paid to adult males and females and to young persons, for the nine leading industries.

IV. *Working Time and Proportion of Business Done.*

Under this head two points are brought out, namely, the average number of days in operation per establishment, based upon the average number of persons employed; and the average proportion of business done per establishment, based upon a maximum production of 100 per cent.

V. *General Summary of Industrial Conditions.* This section is devoted to a general *résumé* of the conditions of the industries of the Commonwealth as indicated by the returns from 4,730 establishments in 1903 and 1904.

The sections, as given above, are followed by analyses of the tabular presentations which bring out more fully the character and value of the returns, to the reading of which attention is especially called.

It will be understood that the term "All Industries" refers to the numerical aggregates of the various columns of the statistical presentations, derived, this year, from the returns of 4,730 identical establishments. In these annual comparisons, the importance of considering each volume by itself is again pointed out in order that unwarranted deductions may not be made.



### Establishments and Their Management.

The word "Establishment," as used in this Report, should be understood as meaning the factory, mill, or shop from which a report has been secured, and not the firm or corporation controlling said factory, mill, or shop.

The following table presents the number of establishments compared each year since the first publication of these annual reports :

YEARS.	Establishments	YEARS.	Establishments	YEARS.	Establishments
1886, 1887, . .	1,027	1893, . . . .	4,397	1899, . . . .	4,740
1888, . . . .	1,140	1894, . . . .	4,093	1900, . . . .	4,645
1889, . . . .	1,364	1895, . . . .	3,629	1901, . . . .	4,696
1890, . . . .	3,041	1896, . . . .	4,609	1902, . . . .	4,658
1891, . . . .	3,745	1897, . . . .	4,695	1903, . . . .	4,673
1892, . . . .	4,473	1898, . . . .	4,701	1904, . . . .	4,730

It will be seen from the above figures that for the years 1886, 1887, only 1,027 establishments entered into the comparison. This has gradually been extended from year to year until for 1903, 1904 it is possible to make comparison for 4,730 establishments. The value of product turned out in these various plants represents more than nine-tenths of the total output of the State as shown by the Census of 1900, and the results may therefore be regarded as being typical of the State as a whole.

The first presentation, pages 310 and 311, shows the number of establishments considered and the number controlled by private firms and corporations, respectively, including, in the latter, industrial combinations which are similar in form of management, and which are designated in the industries where they occur by footnotes to the table.

The second presentation, pages 312 and 313, shows the number of partners managing these private firms and the number of stockholders interested in the management of the corporations.

Special attention is called to the headnotes preceding these tables, which explain the method followed in their construction.

# PRIVATE FIRMS AND CORPORATIONS: BY INDUSTRIES.

1903, 1904.

[This presentation shows the aggregate number of establishments considered and the number of private firms and corporations engaged in their management. There are certain duplications caused by the fact that the same firm or corporation is often engaged in manufacturing in more than one industry or may carry on two or more establishments in the same industry. The industries in which these duplications occur have been indicated by an asterisk (\*), and the plan adopted has been to count the private firm or corporation only once, if in the same industry. Where they occur in different industries, however, they have been credited to each in turn, but in making up the total for All Industries have been counted only once. The final line of the table, therefore, shows the exact number of different private firms and corporations conducting the specified number of establishments.]

INDUSTRIES.	Number of Es- tab- lish- ments Con- sidered	NUMBER OF PRIVATE FIRMS		NUMBER OF CORPORATIONS	
		1903	1904	1903	1904
Agricultural implements, . . . . .	8	4	4	4	4
Arms and ammunition, . . . . .	13	8	7	5	6
Artisans' tools, . . . . .	74	45	45	*29	*29
Awnings, sails, tents, etc., . . . . .	34	34	34	-	-
Bicycles, tricycles, etc., . . . . .	6	1	1	5	5
Boots and shoes,* . . . . .	656	538	526	112	124
Boots and shoes (factory product),* . . . . .	390	295	286	89	98
Soles, heels, and cut stock,* . . . . .	200	184	181	16	19
Boot and shoe findings, . . . . .	44	37	37	7	7
Stitching, heelings, etc., . . . . .	22	22	22	-	-
Boxes, barrels, kegs, etc.,* . . . . .	122	93	89	27	31
Boxes (paper ,* . . . . .	71	52	49	17	20
Brick, tiles, and sewer pipe,* . . . . .	63	42	41	*13	*14
Brooms, brushes, and mops, . . . . .	33	26	26	7	7
Building materials, . . . . .	46	31	30	15	16
Burial cases, caskets, coffins, etc., . . . . .	3	2	2	1	1
Buttons and dress trimmings, . . . . .	9	5	4	4	5
Carpetings, . . . . .	10	3	3	5	5
Carriages and wagons, . . . . .	107	88	88	19	19
Cement, kaolin, lime, and plaster, . . . . .	13	4	4	*6	*6
Chemical preparations (compounded), . . . . .	12	6	6	6	6
Clocks and watches, . . . . .	11	4	4	7	7
Clothing, . . . . .	155	117	113	38	42
Cooking, lighting, and heating apparatus,* . . . . .	39	20	19	19	20
Cordage and twine, . . . . .	24	14	14	10	10
Cotton goods,* . . . . .	166	27	24	†126	†129
Cotton goods (woven),* . . . . .	124	15	14	105	106
Cotton yarn and thread,* . . . . .	35	9	7	†17	†19
Cotton waste,* . . . . .	7	3	3	4	4
Crayons, pencils, crucibles, etc., . . . . .	5	4	4	1	1
Drugs and medicines, . . . . .	30	15	15	15	15
Dyestuffs, . . . . .	6	2	2	4	4
Earthen, plaster, and stone ware, . . . . .	11	9	8	2	3
Electrical apparatus and appliances, . . . . .	24	9	9	15	15
Electroplating,* . . . . .	10	9	9	1	1
Emery and sand paper and cloth, etc., . . . . .	8	-	-	8	8
Fancy articles, etc., . . . . .	16	11	11	5	5
Fertilizers,* . . . . .	6	2	2	*4	*4

\* Includes one industrial combination.

† Includes two industrial combinations.

PRIVATE FIRMS AND CORPORATIONS: BY INDUSTRIES. 1903,  
1904 — Concluded.

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	NUMBER OF PRIVATE FIRMS		NUMBER OF CORPORATIONS	
		1903	1904	1903	1904
Fine arts and taxidermy, . . . . .	3	1	1	2	2
Fireworks and matches, . . . . .	3	2	2	1	1
Flax, hemp, and jute goods, . . . . .	9	1	1	8	8
Food preparations,* . . . . .	333	266	254	†63	†75
Furniture, . . . . .	138	106	101	31	36
Glass, . . . . .	13	11	11	2	2
Glue, isinglass, and starch, . . . . .	16	11	11	5	5
Hair work (animal and human), . . . . .	4	4	4	-	-
Hose and belting: rubber, linen, etc., . . . . .	7	4	4	3	3
Hosiery and knit goods, . . . . .	38	16	15	22	23
Ink, mucilage, and paste, . . . . .	8	7	6	1	2
Ivory, bone, shell, and horn goods, etc., . . . . .	31	21	21	10	10
Jewelry, . . . . .	105	83	76	22	29
Leather,* . . . . .	105	74	70	*21	*25
Leather goods,* . . . . .	31	15	16	16	15
Liquors (bottled) and carbonated beverages, . . . . .	25	17	17	8	8
Liquors (malt), . . . . .	39	5	5	*21	*21
Liquors (distilled), . . . . .	6	5	5	1	1
Lumber, . . . . .	21	16	16	4	4
Machines and machinery,* . . . . .	375	199	198	*172	*173
Metals and metallic goods,* . . . . .	393	236	230	†154	†180
Models, lasts, and patterns,* . . . . .	44	37	37	7	7
Musical instruments and materials, . . . . .	51	22	22	29	29
Oils and illuminating fluids, . . . . .	11	6	6	4	4
Paints, colors, and crude chemicals, . . . . .	27	16	15	11	12
Paper,* . . . . .	81	14	13	†42	†43
Paper goods,* . . . . .	43	19	19	†18	†18
Photographs and photographic materials, . . . . .	13	9	11	4	2
Polishes and dressing, . . . . .	42	32	32	10	10
Printing, publishing, and bookbinding, . . . . .	63	33	32	30	31
Print works, dye works, and bleacheries,* . . . . .	46	22	21	24	25
Railroad construction and equipment, . . . . .	19	2	2	§7	§7
Rubber and elastic goods,* . . . . .	46	15	14	31	32
Saddlery and harness, . . . . .	20	18	18	2	2
Scientific instruments and appliances, . . . . .	18	12	11	6	7
Shipbuilding, . . . . .	40	34	32	6	8
Silk and silk goods, . . . . .	13	6	6	7	7
Sporting and athletic goods,* . . . . .	13	7	6	6	7
Stone, . . . . .	185	164	163	19	20
Quarried, . . . . .	46	31	30	13	14
Cut and monumental, . . . . .	139	133	133	6	6
Straw and palm leaf goods, . . . . .	18	12	12	6	6
Tallow, candles, soap, and grease,* . . . . .	48	31	29	*15	*18
Tobacco, snuff, and cigars, . . . . .	84	72	69	12	15
Toys and games (children's),* . . . . .	10	§	2	*5	*5
Trunks and valises, . . . . .	8	7	7	1	1
Whips, lashes, and stocks, . . . . .	16	8	7	8	9
Wooden goods, . . . . .	74	65	65	9	9
Woolen goods,* . . . . .	160	85	81	†67	†70
Woven goods and yarn,* . . . . .	132	65	60	†59	†63
Shoddy, waste, etc., . . . . .	28	20	21	8	7
Worsted goods,* . . . . .	43	17	15	*21	*23
ALL INDUSTRIES, . . . . .	4,730	3,085	2,997	1,489	1,572

\* Includes one industrial combination.

† Includes two industrial combinations.

‡ Includes three industrial combinations.

§ Includes three railroad corporations.

|| Includes 20 industrial combinations.

# PARTNERS AND STOCKHOLDERS: BY INDUSTRIES.

1903, 1904.

[This presentation shows the number of partners and stockholders engaged in the management of the 4,730 establishments. As in the preceding presentation, duplications occur in the industries indicated by an asterisk (\*), since the same firm or corporation is often engaged in manufacturing in more than one industry or may carry on two or more establishments in the same industry. The plan adopted has been to count the partners or stockholders only once if they occur in the same industry. Where they occur in different industries, however, they have been credited to each in turn, but in making up the total for All Industries have been counted only once. Stockholders in certain establishments which are operated by railroad companies, or by industrial combinations, many of which have extensive investments of capital outside this Commonwealth, are not included in this presentation, since to include all the stockholders of a railroad company or of an industrial combination in connection with such merely branch establishments, incidental only to the main business of the corporation, would result in abnormally increasing the aggregate.]

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	NUMBER OF PARTNERS		NUMBER OF STOCKHOLDERS	
		1903	1904	1903	1904
Agricultural implements, . . . . .	5	5	5	85	83
Arms and ammunition, . . . . .	13	13	12	200	204
Artisans' tools, . . . . .	74	71	69	1,927	1,907
Awnings, sails, tents, etc., . . . . .	34	44	45	-	-
Bicycles, tricycles, etc., . . . . .	6	2	2	81	425
Boots and shoes,* . . . . .	856	961	892	2,479	2,607
Boots and shoes (factory product),*	390	502	479	2,081	2,061
Soles, heels, and cut stock,* . . . . .	200	274	271	343	362
Boot and shoe findings, . . . . .	44	57	56	55	184
Stitching, heelings, etc., . . . . .	22	25	26	-	-
Boxes, barrels, kegs, etc.,* . . . . .	122	124	124	154	182
Boxes (paper),* . . . . .	71	71	63	97	128
Brick, tiles, and sewer pipe,* . . . . .	63	66	63	1,453	1,643
Brooms, brushes, and mops, . . . . .	33	38	33	167	150
Building materials, . . . . .	45	49	49	181	211
Burial cases, caskets, coffins, etc., . . . . .	3	5	5	43	42
Buttons and dress trimmings, . . . . .	9	5	4	21	24
Carpetings, . . . . .	10	5	5	1,020	1,029
Carriages and wagons, . . . . .	107	138	137	171	209
Cement, mortar, lime, and plaster, . . . . .	13	10	10	31	42
Chemical preparations (compounded), . . . . .	12	9	9	137	133
Clocks and watches, . . . . .	11	8	8	673	673
Clothing, . . . . .	155	217	202	763	767
Cooking, lighting, and heating apparatus,* . . . . .	30	31	29	263	276
Cordage and twine, . . . . .	24	22	23	994	792
Cotton goods,* . . . . .	166	49	44	22,296	22,160
Cotton goods (woven),* . . . . .	124	30	25	21,213	21,043
Cotton yarn and thread,* . . . . .	35	14	19	1,067	1,092
Cotton waste,* . . . . .	7	5	5	26	25
Crayons, pencils, erasables, etc., . . . . .	5	4	4	12	4
Drugs and medicines, . . . . .	30	23	25	1,000	1,206
Dyestuffs, . . . . .	6	4	5	83	75
Earthen, plaster, and stone ware, . . . . .	11	10	10	10	19
Electrical apparatus and appliances, . . . . .	24	15	14	302	310
Electroplating,* . . . . .	10	10	10	3	4
Emery and sand paper and cloth, etc., . . . . .	3	-	-	152	161



## PARTNERS AND STOCKHOLDERS: BY INDUSTRIES. 1903, 1904

— Concluded.

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	NUMBER OF PARTNERS		NUMBER OF STOCKHOLDERS	
		1903	1904	1903	1904
Fancy articles, etc., . . . . .	16	13	13	51	45
Fertilizers,* . . . . .	6	3	2	293	293
Fine arts and taxidermy, . . . . .	3	1	1	11	11
Fireworks and matches, . . . . .	3	4	4	5	5
Flax, hemp, and jute goods, . . . . .	9	2	2	156	169
Food preparations,* . . . . .	323	385	359	1,300	1,419
Furniture, . . . . .	133	170	160	617	657
Glass, . . . . .	13	20	20	52	49
Glue, isinglass, and starch, . . . . .	15	21	20	47	49
Hair work (animal and human), . . . . .	4	5	5	-	-
Hose and belting: rubber, linen, etc., . . . . .	7	5	5	13	13
Hosiery and knit goods, . . . . .	38	27	26	1,028	1,082
Ink, mucilage, and paste, . . . . .	8	10	9	4	9
Ivory, bone, shell, and horn goods, etc., . . . . .	31	38	34	70	58
Jewelry, . . . . .	105	102	145	95	116
Leather,* . . . . .	105	119	112	133	149
Leather goods,* . . . . .	31	22	24	337	345
Liquors (bottled) and carbonated beverages, . . . . .	25	25	25	98	107
Liquors (malt), . . . . .	39	13	14	1,324	1,320
Liquors (distilled), . . . . .	6	9	9	25	29
Lumber, . . . . .	21	24	24	75	77
Machineries and machinery,* . . . . .	375	284	296	6,794	5,433
Metals and metallic goods,* . . . . .	393	343	336	2,695	2,699
Models, lasts, and patterns,* . . . . .	44	61	63	39	38
Musical instruments and materials, . . . . .	51	29	27	303	275
Oils and illuminating fluids, . . . . .	11	7	7	23	25
Paints, colors, and crude chemicals, . . . . .	27	27	25	155	171
Paper,* . . . . .	81	33	29	528	548
Paper goods,* . . . . .	43	31	31	370	407
Photographs and photographic materials, . . . . .	13	10	12	42	15
Polishes and dressing, . . . . .	42	52	50	50	52
Printing, publishing, and bookbinding, . . . . .	63	64	63	343	366
Print works, dye works, and bleacheries,* . . . . .	46	33	28	1,403	1,403
Railroad construction and equipment, . . . . .	19	2	2	50	51
Rubber and elastic goods,* . . . . .	46	33	32	1,315	1,408
Saddlery and harness, . . . . .	20	26	25	20	19
Scientific instruments and appliances, . . . . .	18	18	17	138	184
Shipbuilding, . . . . .	40	43	41	127	137
Silk and silk goods, . . . . .	13	7	7	100	109
Sporting and athletic goods,* . . . . .	13	8	7	58	70
Stone, . . . . .	185	239	236	515	490
Quarried, . . . . .	46	46	44	452	399
Cut and monumental, . . . . .	139	193	192	63	60
Straw and palm leaf goods, . . . . .	13	27	25	28	31
Tallow, candles, soap, and grease,* . . . . .	43	45	45	125	91
Tobacco, snuff, and cigars, . . . . .	84	96	92	81	96
Toys and games (children's),* . . . . .	10	5	3	26	24
Trunks and valises, . . . . .	8	13	13	2	3
Whip*, lashes, and stocks, . . . . .	16	11	10	239	235
Wooden goods, . . . . .	74	85	84	119	110
Woolen goods,* . . . . .	160	131	131	1,710	1,743
Woven goods and yarn,* . . . . .	132	106	103	1,668	1,707
Shoddy, waste, etc., . . . . .	28	25	28	42	36
Worsted goods,* . . . . .	43	28	28	716	745
ALL INDUSTRIES, . . . . .	4,730	4,777	4,611	56,115	56,053

*Analysis.*

The first presentation, pages 310 and 311, shows the number of establishments entering into the comparison for the years 1903 and 1904, and the number of private firms, corporations, and combinations controlling or managing them. The final line of the table shows that in 1903 there were 3,085 private firms and 1,489 corporations. In 1904, there were 2,997 private firms and 1,572 corporations, a decrease in the number of private firms of 88, or 2.85 per cent, and an increase of 83 in the number of corporations, or 5.57 per cent. As the number of establishments compared remains the same in both years, it would be supposed that a decrease in number of firms would be accompanied by a corresponding increase in the number of corporations; the difference of five is, however, accounted for in the fact that in 1904 the same corporation controlled two or more establishments which, in 1903, had separate existence as private firms. Included with the corporations, because similar in form of management, are 20 industrial combinations in 1903 and the same number in 1904. Footnotes to the table indicate the industries in which they are represented.

Attention is called to the note preceding the table on pages 310 and 311 which states that there are duplications in the columns devoted to the number of private firms and number of corporations. They are caused by the fact that the same firm or corporation may be engaged in manufacturing in two or more establishments in the same or sometimes in different industries. If in the same industry, the private firm or corporation has been counted only once. Where they occur in different industries, however, they are credited to each in turn, but in making up the total for All Industries they are counted only once.

These duplications in management are quite considerable in the aggregate, there being 156 instances in 1903 and 161 in 1904. The industries in which they occur are brought out in the following table:



INDUSTRIES.	NUMBER		INDUSTRIES.	NUMBER	
	1903	1904		1903	1904
Boots and shoes, . . . . .	6	6	Metals and metallic goods, . .	5	5
Boxes, barrels, kegs, etc., . .	2	2	Oils and illuminating fluids, . .	1	1
Boxes (paper), . . . . .	4	5	Paper, . . . . .	28	28
Brick, tiles, and sewer pipe, . .	8	8	Paper goods, . . . . .	6	6
Carpetings, . . . . .	2	2	Print works, dye works, and		
Cement, kaolin, lime, and plas-			bleacheries, . . . . .	3	3
ter, . . . . .	3	3	Railroad construction and		
Cooking, lighting, and heating			equipment, . . . . .	10	10
apparatus, . . . . .	1	1	Rubber and elastic goods, . .	2	2
Cotton goods, . . . . .	4	4	Sporting and athletic goods, . .	1	1
Cotton yarn and thread, . . . .	9	9	Stone, . . . . .	2	2
Electroplating, . . . . .	1	1	Tallow, candles, soap, and		
Food preparations, . . . . .	5	5	grease, . . . . .	4	5
Furniture, . . . . .	1	1	Toys and games (children's), . .	2	3
Leather, . . . . .	10	10	Woolen goods, . . . . .	10	12
Liquors (malt), . . . . .	13	13	Worsted goods, . . . . .	7	7
Lumber, . . . . .	1	1			
Machines and machinery, . . . .	5	5	TOTALS, . . . . .	156	161

Of the 156 duplications in 1903, 15 are among private firms, 67 in corporations, and 74 in industrial combinations. In 1904, they are found 13 in private firms, 72 in corporations, and 76 in combinations. Here, too, as in the total figures, may be noted the tendency to change from the private firm to the corporate form of management, and from the corporate form to that of the industrial combination. Of the entire 4,730 establishments, therefore, it will be seen that 3,100 were in the hands of private firms in 1903, 1,536 were controlled by corporations, and 94 by industrial combinations, while of these same establishments in 1904, 3,010 were in the hands of private firms, 1,624 in the hands of corporations, and 96 in industrial combinations.

The presentation on pages 312 and 313 shows the number of partners and stockholders interested in the private firms and corporations in 1903 and 1904.

As in the preceding table, duplications have been eliminated to the extent specified, and, as stated in the headnote to the table, the stockholders of establishments operated by railroad companies or by industrial combinations, many of which have extensive investments of capital outside of Massachusetts, have not been included in the figures, since to include such would abnormally increase the aggregate.

From the final line of the presentation it will be noted that the number of partners declined from 4,777 in 1903 to 4,611 in 1904, a decrease of 166, or 3.47 per cent. The number of

stockholders decreased from 56,115 in 1903 to 56,053 in 1904, a loss of 62, or 0.11 per cent.

The following table shows the number of partners and stockholders, by sex, for All Industries, for 1903 and 1904:

PARTNERS AND STOCKHOLDERS.	NUMBER		INCREASE (+) OR DECREASE (-) IN 1904	
	1903	1904	Number	Percentages
<i>Partners.</i>	4,777	4,611	-166	-3.47
Males, . . . . .	4,537	4,375	-162	-3.57
Females, . . . . .	179	197	+18	+10.06
Estates, . . . . .	61	39	-22	-36.07
<i>Stockholders.</i>	56,115	56,053	-62	-0.11
Males, . . . . .	32,222	31,748	-474	-1.47
Females, . . . . .	18,339	18,141	-198	-1.08
Bank, trustees, etc., . . . . .	5,554	6,164	+610	+10.98
<i>AGGREGATES.</i>	60,892	60,664	-228	-0.37
Males, . . . . .	36,759	36,123	-636	-1.73
Females, . . . . .	18,518	18,338	-180	-0.97
Estates, banks, etc., . . . . .	5,615	6,203	+588	+10.47

The tendency to concentrate the direction of both private firms and corporations into fewer hands is emphasized by the figures in the above table. The total number of partners in 1903 was 4,777 and in 1904, 4,611, a decrease of 166, or 3.47 per cent. The number of males fell from 4,537 in 1903 to 4,375 in 1904, while the number of females shows an increase from 179 to 197, a gain of 18, or 10.06 per cent. The number of estates decreased from 61 to 39, a decline of 22, or 36.07 per cent.

The number of stockholders, in the aggregate, fell from 56,115 in 1903 to 56,053 in 1904, a decrease of 62, or 0.11 per cent. The number of males shows decline from 32,222 to 31,748, a decrease of 474, or 1.47 per cent, while the number of females fell from 18,339 to 18,141, a decrease of 198, or 1.08 per cent. The number of banks, trustees, etc., shows a gain, 5,554 in 1903 as against 6,164 in 1904, an increase of 610, or 10.98 per cent.

The aggregate for partners and stockholders shows decline in 1904 as compared with 1903, the total number being 60,664 in 1904 as against 60,892 in 1903, a decrease of 228, or 0.37 per cent. The decrease in number of males was from 36,759 to 36,123, a decline of 636, or 1.73 per cent, while the decrease in number of females was 180, or 0.97 per cent. The

number of estates, banks, etc., rose from 5,615 in 1903 to 6,203 in 1904, an increase of 588, or 10.47 per cent.

The following table shows the number of private firms and corporations, with the number of partners and stockholders in the aggregate and the average :

CLASSIFICATION.	NUMBER		CLASSIFICATION.	NUMBER	
	1903	1904		1903	1904
Private firms, . . . . .	3,085	2,997	Corporations, . . . . .	1,469	1,552
Partners, . . . . .	4,777	4,611	Stockholders, . . . . .	56,115	56,053
Average number of partners to a private firm, . . . . .	1.55	1.54	Average number of stockhold- ers to a corporation, . . . . .	38.20	36.12

The average number of partners to a private firm was 1.55 in 1903 as against 1.54 in 1904. The average number of stockholders to a corporation fell from 38.20 in 1903 to 36.12 in 1904.

The returns for 1904 may be summarized as follows: Reports were received from 4,730 establishments classified in 79 different industries. These establishments were conducted by 2,997 private firms, 1,552 corporations, and 20 industrial combinations. In other words, 65.59 per cent were in the hands of private firms, 33.97 per cent were managed by corporations, and 0.44 per cent by industrial combinations. Interested in the management of these establishments were 60,664 persons, of whom 4,611, or 7.60 per cent, were partners, and 56,053, or 92.40 per cent, were stockholders. Of the partners, 94.88 per cent were males, 4.27 per cent females, and 0.85 per cent were estates. Of the stockholders, 56.64 per cent were males, 32.36 per cent females, and 11 per cent banks, trustees, etc. The average number of partners to a private firm was 1.54, and the average number of stockholders to a corporation 36.12.

### Investment, Materials Used, and Product.

Under this head three presentations are shown, relating respectively to amount of capital, the value of stock and materials used, and value of goods made and work done in the 4,730 establishments entering into the comparison for the years 1903 and 1904.

As has been stated, the year 1905 was constituted a Census year and while the schedule adopted for the Census was, for the most part, substantially the same as that in use for the collection of Annual Statistics, there was material difference in the form of inquiry regarding capital. For 1903 the items asked for were as follows:

#### INVESTMENT.

*Under this head no other items are desired than those specified below.*

- |   |    |
|---|----|
| A. Value of LAND, BUILDINGS, and FIXTURES used only for manufacturing purposes (if owned), . . . . .  | \$ |
| B. Value of TOOLS, MACHINERY, and MOTIVE POWER (if owned), . . . . .  | \$ |
| C. Value of PATENT RIGHTS, PATTERNS, etc (if owned), . . . . .  | \$ |
| D. CASH on hand and in Bank, December 31 (or at end of last fiscal year), . . . . .   | \$ |
| E. Value <i>at cost</i> of RAW MATERIALS and ARTICLES TO BE USED IN THE INDUSTRY, on hand December 31 (or at end of last fiscal year), including also value of Goods in process of manufacture (completed goods on hand <i>not</i> to be included), . . . . . | \$ |

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TOTAL OF FIVE SPECIFIED ITEMS, . . . . .	\$
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The inquiry for the Census is given below.

**CAPITAL INVESTED — OWNED AND BORROWED:** The answer must show the total amount of capital, both owned and borrowed. All the items of fixed and live capital may be taken at the amounts carried on the books. If land or buildings are rented, that fact should be stated and no value given. If a part of the land or buildings is owned, the remainder being rented, the fact should be stated, and only the value of the owned property given. The value of all items of live capital,



bills receivable, unsettled ledger accounts, materials on hand, stock in process of manufacture, finished products, and cash on hand, etc., should be given as of the last day of the business year reported.

Land _____	\$ _____
Buildings _____	\$ _____
Machinery, tools, and implements _____	\$ _____
Bills receivable, unsettled ledger accounts, raw materials, stock in process of manufacture, finished products and cash on hand, and other sundries _____	\$ _____
TOTAL CAPITAL _____	\$ _____

Obviously, there can be no comparison. The scope of the Census inquiry is much wider than that of the Annual Statistics, and the last-named item on the Federal schedule is somewhat vague, and is, moreover, subject to so much individual interpretation that it would be difficult to determine the statistical value of figures so variously made up. For the presentation on pages 320 and 321, therefore, the increase or decrease in amounts and percentages has been omitted this year. It should not be assumed, however, that the larger figures shown for 1904 represent increased investment, for such is, undoubtedly, not the case. The difference, as has been stated, is due to the inclusion in the Census schedule for 1904 of such items as bills receivable, unsettled ledger accounts, finished products on hand, and other sundries not specified as to their nature.

The figures given in the presentation for stock used include the cost value of all materials used in the construction of the manufactured articles or consumed in the processes necessary to their production.

The figures given for goods made represent the selling value of the product turned out in the 4,730 establishments entering into the comparison for the years 1903 and 1904. In these establishments the aggregate value of output for 1904 is about 90 per cent of the product as determined by a full Census, and the increase or decrease shown in the various industries may, therefore, be regarded as typical of the State as a whole.

## CAPITAL INVESTED: BY INDUSTRIES.

1903, 1904.

[The figures given in this presentation represent the returns made by the same establishments, in each industry, for the years 1903 and 1904, the whole number of establishments considered in "All Industries" being 4,730. No comparison is possible, owing to the fact that the figures for 1904 were taken on a different basis from those of 1903, in order to comply with the requirements of the Census. The percentages of increase or decrease in 1904 as compared with 1903, therefore, have been omitted.]

INDUSTRIES.	Number of Establishments Considered	AMOUNT OF	
		Capital De- voted to Production	Capital In- vested
		1903	1904
Agricultural implements, . . . . .	8	\$996,470	\$3,085,643
Arms and ammunition, . . . . .	13	3,397,580	4,677,827
Artisans' tools, . . . . .	74	4,213,148	6,435,957
Awnings, sails, tents, etc., . . . . .	34	179,809	234,296
Bicycles, tricycles, etc., . . . . .	6	1,446,874	1,296,086
Boots and shoes, . . . . .	656	28,193,125	56,722,855
Boots and shoes (factory product), . . . . .	390	24,065,035	47,731,720
Soles, heels, and cut stock, . . . . .	200	3,234,819	7,560,026
Boot and shoe findings, . . . . .	44	820,660	1,348,794
Stitching, heeling, etc., . . . . .	22	72,614	82,315
Boxes, barrels, kegs, etc., . . . . .	122	3,731,422	5,573,638
Boxes (paper), . . . . .	71	1,586,444	1,996,851
Brick, tiles, and sewer pipe, . . . . .	63	2,054,291	2,690,166
Brooms, brushes, and mops, . . . . .	33	1,153,886	1,798,250
Building materials, . . . . .	46	1,494,999	2,219,677
Burial cases, caskets, coffins, etc., . . . . .	3	297,002	406,181
Buttons and dress trimmings, . . . . .	9	271,490	343,452
Carpetings, . . . . .	10	6,105,858	7,201,419
Carriages and wagons, . . . . .	107	3,025,300	4,556,312
Cement, kaolin, lime, and plaster, . . . . .	13	225,162	365,065
Chemical preparations (compounded), . . . . .	12	1,040,188	1,418,874
Clocks and watches, . . . . .	11	6,717,120	7,460,560
Clothing, . . . . .	155	6,819,360	13,928,471
Cooking, lighting, and heating apparatus, . . . . .	39	1,529,972	3,220,782
Cordage and twine, . . . . .	24	3,650,564	8,439,290
Cotton goods, . . . . .	166	132,873,970	170,366,954
Cotton goods (woven), . . . . .	124	111,335,798	144,089,596
Cotton yarn and thread, . . . . .	35	20,824,671	25,101,452
Cotton waste, . . . . .	7	713,501	1,175,906
Crayons, pencils, crucibles, etc., . . . . .	5	90,954	124,705
Drugs and medicines, . . . . .	30	2,637,174	4,484,189
Dyestuffs, . . . . .	6	579,082	796,135
Earthen, plaster, and stone ware, . . . . .	11	231,253	368,197
Electrical apparatus and appliances, . . . . .	24	7,184,125	10,464,382
Electroplating, . . . . .	10	104,546	156,089
Emery and sand paper and cloth, etc., . . . . .	8	560,462	1,124,907
Fancy articles, etc., . . . . .	16	395,297	640,844
Fertilizers, . . . . .	6	642,887	3,672,708
Fine arts and taxidermy, . . . . .	3	43,442	60,090
Fireworks and matches, . . . . .	3	48,419	136,206
Flax, hemp, and jute goods, . . . . .	9	4,792,902	6,152,343



## CAPITAL INVESTED: BY INDUSTRIES. 1903, 1904—Concluded.

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	AMOUNT OF	
		Capital De- voted to Production	Capital In- vested
		1903	1904
Food preparations, . . . . .	333	\$20,600,213	\$30,730,408
Furniture, . . . . .	138	9,571,483	14,408,952
Glass, . . . . .	13	193,005	335,967
Glue, isinglass, and starch, . . . . .	16	590,873	1,127,593
Hair work (animal and human), . . . . .	4	95,525	158,600
Hose and belting: rubber, linen, etc., . . . . .	7	183,281	415,035
Hosiery and knit goods, . . . . .	38	5,363,534	7,521,133
Ink, mucilage, and paste, . . . . .	8	127,022	336,262
Ivory, bone, shell, and horn goods, etc., . . . . .	31	1,258,655	2,132,093
Jewelry, . . . . .	105	4,055,206	8,104,191
Leather, . . . . .	105	13,633,501	23,733,643
Leather goods, . . . . .	31	2,023,441	3,641,072
Liquors (bottled) and carbonated beverages, . . . . .	25	647,411	916,155
Liquors (malt), . . . . .	39	15,376,657	22,067,716
Liquors (distilled), . . . . .	6	441,817	729,598
Lumber, . . . . .	21	894,866	2,263,371
Machines and machinery, . . . . .	375	43,059,581	67,984,509
Metals and metallic goods, . . . . .	393	24,390,828	33,634,426
Models, lasts, and patterns, . . . . .	44	1,002,290	1,395,020
Musical instruments and materials, . . . . .	51	4,632,265	7,862,975
Oils and illuminating fluids, . . . . .	11	868,531	1,401,764
Paints, colors, and crude chemicals, . . . . .	27	610,342	1,327,173
Paper, . . . . .	81	24,073,141	40,286,633
Paper goods, . . . . .	43	6,001,063	5,202,237
Photographs and photographic materials, . . . . .	13	128,096	225,365
Polishes and dressing, . . . . .	42	724,581	1,927,882
Printing, publishing, and bookbinding, . . . . .	63	7,800,206	8,447,756
Print works, dye works, and bleacheries, . . . . .	46	17,377,465	30,555,027
Railroad construction and equipment, . . . . .	19	2,864,040	4,573,836
Rubber and elastic goods, . . . . .	46	12,836,645	20,094,728
Saddlery and harness, . . . . .	20	376,024	751,937
Scientific instruments and appliances, . . . . .	13	1,618,519	2,064,034
Shipbuilding, . . . . .	40	1,477,597	1,706,978
Silk and silk goods, . . . . .	13	2,476,808	5,257,430
Sporting and athletic goods, . . . . .	13	769,710	1,278,797
Stone, . . . . .	185	6,944,152	9,994,651
Quarried, . . . . .	46	4,849,873	7,038,513
Cut and monumental, . . . . .	139	2,094,279	2,956,138
Straw and palm leaf goods, . . . . .	18	1,996,711	2,426,811
Tallow, candles, soap, and grease, . . . . .	48	2,545,243	2,967,003
Tobacco, snuff, and cigars, . . . . .	84	1,220,363	1,994,554
Toys and games (children's), . . . . .	10	576,523	652,543
Trunks and valises, . . . . .	8	113,080	238,429
Whips, lashes, and stocks, . . . . .	16	598,967	2,121,005
Wooden goods, . . . . .	74	1,553,423	2,216,920
Woolen goods, . . . . .	160	33,889,148	47,096,360
Woven goods and yarn, . . . . .	132	32,438,917	45,026,417
Shoddy, waste, etc., . . . . .	28	1,450,231	2,069,943
Worsted goods, . . . . .	43	32,407,820	39,420,379
ALL INDUSTRIES, . . . . .	4,730	\$548,314,237	\$807,433,857

## STOCK USED: BY INDUSTRIES.

1903, 1904.

[In this presentation, the figures given under "Value of Stock and Materials Used" represent the returns made by the same establishments, in each industry, for the years 1903 and 1904, the whole number of establishments considered in "All Industries" being 4,730. The relative increases or decreases in 1904 as compared with 1903 are given with equivalent percentages.]

INDUSTRIES.	Number of Establishments Considered	VALUE OF STOCK AND MATERIALS USED		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percentages
Agricultural implements, . . . . .	8	\$747,932	\$682,123	-\$65,809	-8.80
Arms and ammunition, . . . . .	13	939,342	1,196,369	+257,027	+27.36
Artisans' tools, . . . . .	74	1,942,114	1,623,057	-314,057	-1.62
Awnings, sails, tents, etc., . . . . .	34	417,770	369,683	-48,087	-11.51
Bicycles, tricycles, etc., . . . . .	6	428,015	497,532	+69,517	+16.24
Boots and shoes, . . . . .	656	100,737,707	103,916,188	+3,178,481	+3.16
Boots and shoes (factory product), . . . . .	390	82,945,622	85,332,635	+2,387,013	+2.88
Soles, heels, and cut stock, . . . . .	200	16,115,947	16,576,615	+460,668	+2.86
Boot and shoe findings, . . . . .	44	1,610,486	1,954,067	+343,581	+21.33
Stitching, heelings, etc., . . . . .	22	65,652	52,871	-12,781	-19.47
Boxes, barrels, kegs, etc., . . . . .	122	4,434,892	4,678,209	+243,317	+5.49
Boxes (paper), . . . . .	71	1,575,865	1,547,383	-28,482	-1.81
Brick, tiles, and sewer pipe, . . . . .	63	472,472	333,694	-138,778	-29.37
Brooms, brushes, and mops, . . . . .	33	1,378,552	1,381,781	+3,229	+0.23
Building materials, . . . . .	46	1,535,528	1,423,680	-111,848	-7.28
Burial cases, caskets, coffins, etc., . . . . .	3	149,468	162,747	+13,279	+8.88
Buttons and dress trimmings, . . . . .	9	189,313	256,452	+67,139	+35.46
Carpetings, . . . . .	10	6,844,167	6,818,838	-25,329	-0.37
Carriages and wagons, . . . . .	107	2,038,268	2,345,157	+306,889	+15.06
Cement, kaolin, lime, and plaster, . . . . .	13	230,197	341,098	+110,901	+48.18
Chemical preparations (compounded), . . . . .	12	1,073,010	876,403	-196,607	-18.32
Clocks and watches, . . . . .	11	872,609	871,850	-759	-0.09
Clothing, . . . . .	155	14,353,020	15,277,345	+924,325	+6.44
Cooking, lighting, and heating apparatus, . . . . .	39	1,378,192	2,144,902	+766,710	+55.63
Cordage and twine, . . . . .	24	8,371,392	9,335,794	+964,402	+11.52
Cotton goods, . . . . .	166	78,274,573	82,407,903	+4,133,330	+5.28
Cotton goods (woven), . . . . .	124	63,569,056	68,035,638	+4,466,582	+7.03
Cotton yarn and thread, . . . . .	35	12,681,560	12,203,402	-478,158	-3.77
Cotton waste, . . . . .	7	2,023,957	2,168,863	+144,906	+7.16
Crayons, pencils, crucibles, etc., . . . . .	5	77,846	74,144	-3,702	-4.75
Drugs and medicines, . . . . .	30	2,213,576	2,106,624	-106,952	-4.83
Dyestuffs, . . . . .	6	332,093	324,417	-7,676	-2.31
Earthen, plaster, and stone ware, . . . . .	11	81,082	101,469	+19,387	+23.91
Electrical apparatus and appliances, . . . . .	24	6,773,332	6,439,764	-333,568	-4.92
Electroplating, . . . . .	10	56,636	55,696	-940	-1.66
Emery and sand paper and cloth, etc., . . . . .	8	338,979	355,817	+16,838	+4.97
Fancy articles, etc., . . . . .	16	593,529	594,310	+781	+0.13
Fertilizers, . . . . .	6	1,067,403	1,421,119	+353,716	+33.14
Fine arts and taxidermy, . . . . .	3	17,395	14,230	-3,165	-18.19
Fireworks and matches, . . . . .	3	61,739	63,326	+6,587	+10.67
Flax, hemp, and jute goods, . . . . .	9	3,597,982	4,308,841	+710,859	+19.76

## STOCK USED: BY INDUSTRIES. 1903, 1904—Concluded.

INDUSTRIES.	Number of Establishments Considered	VALUE OF STOCK AND MATERIALS USED		INCREASE (+) OR DECREASE (−) IN 1904	
		1903	1904	Amounts	Percentages
Food preparations, . . . . .	333	\$63,295,735	\$61,308,495	−\$1,987,240	−3.14
Furniture, . . . . .	138	7,303,469	6,766,835	−536,634	−7.35
Glass, . . . . .	13	170,400	147,238	−23,162	−13.59
Glue, isinglass, and starch, . . .	16	733,191	794,323	+61,132	+8.34
Hair work (animal and human), . .	4	180,500	153,100	−27,400	−15.18
Hose and belting: rubber, linen, etc., . . . . .	7	334,292	360,547	+26,255	+7.85
Hosiery and knit goods, . . . . .	38	4,038,029	4,496,074	+458,045	+11.34
Ink, mucilage, and paste, . . . .	8	248,063	325,864	+77,801	+31.36
Ivory, bone, shell, and horn goods, etc., . . . . .	31	1,633,726	1,903,176	+269,450	+16.49
Jewelry, . . . . .	105	4,248,658	3,692,781	−555,877	−13.08
Leather, . . . . .	105	20,846,121	20,548,240	−297,881	−1.43
Leather goods, . . . . .	31	2,898,001	2,375,142	−522,859	−18.04
Liquors (bottled) and carbonated beverages, . . . . .	25	489,923	401,098	−88,825	−18.13
Liquors (malt), . . . . .	39	3,417,821	3,204,428	−213,393	−6.24
Liquors (distilled), . . . . .	6	1,960,971	2,020,081	+59,110	+3.01
Lumber, . . . . .	21	1,971,182	1,909,248	−61,934	−3.14
Machines and machinery, . . . .	375	22,952,922	20,240,029	−2,712,893	−11.82
Metals and metallic goods, . . . .	393	26,017,516	21,771,869	−4,245,647	−16.32
Models, lasts, and patterns, . . . .	44	403,622	466,478	+62,856	+15.57
Musical instruments and materials, .	51	3,122,185	2,790,259	−331,926	−10.63
Oils and illuminating fluids, . . .	11	1,760,441	1,466,838	−293,603	−16.68
Paints, colors, and crude chemicals, .	27	1,047,337	891,415	−155,922	−14.89
Paper, . . . . .	81	16,953,773	17,737,702	+783,929	+4.62
Paper goods, . . . . .	43	5,489,505	5,452,454	−37,051	−0.67
Photographs and photographic materials, . . . . .	13	119,884	99,362	−20,522	−17.12
Polishes and dressing, . . . . .	42	1,712,724	1,976,764	+264,040	+15.42
Printing, publishing, and book-binding, . . . . .	63	2,744,087	2,938,033	+193,946	+7.07
Print works, dye works, and bleacheries, . . . . .	46	25,034,464	20,770,012	−4,264,452	−17.03
Railroad construction and equipment, . . . . .	19	3,365,353	3,686,789	+321,436	+9.55
Rubber and elastic goods, . . . .	46	19,994,566	22,197,387	+2,202,821	+11.02
Saddlery and harness, . . . . .	20	795,029	685,970	−109,059	−13.72
Scientific instruments and appliances, . . . . .	18	1,128,801	1,219,828	+91,027	+8.06
Shipbuilding, . . . . .	40	898,230	640,964	−257,266	−28.64
Silk and silk goods, . . . . .	13	4,496,561	3,776,582	−719,979	−16.01
Sporting and athletic goods, . . . .	13	916,568	850,744	−65,824	−7.18
Stone, . . . . .	185	1,572,034	1,325,587	−246,447	−15.68
Quarried, . . . . .	46	278,293	237,547	−40,746	−14.64
Cut and monumental, . . . . .	139	1,293,741	1,088,040	−205,701	−15.90
Straw and palm leaf goods, . . . .	18	3,279,799	3,636,498	+356,699	+10.88
Tallow, candles, soap, and grease, .	48	3,502,514	3,142,732	−359,782	−10.27
Tobacco, snuff, and cigars, . . . .	84	2,139,810	2,099,083	−40,727	−1.90
Toys and games (children's), . . . .	10	518,269	442,614	−75,655	−14.60
Trunks and valises, . . . . .	8	202,744	223,924	+21,180	+10.45
Whips, lashes, and stocks, . . . .	16	841,234	770,618	−70,616	−8.39
Wooden goods, . . . . .	74	1,026,628	1,036,930	+10,302	+1.00
Woolen goods, . . . . .	160	31,975,672	32,439,770	+464,098	+1.45
Woven goods and yarn, . . . . .	132	30,545,694	30,961,907	+416,213	+1.36
Shoddy, waste, etc., . . . . .	23	1,429,978	1,477,863	+47,885	+3.35
Worsted goods, . . . . .	43	26,763,110	30,668,362	+3,905,252	+14.59
ALL INDUSTRIES, . . . . .	4,730	\$568,141,454	\$570,209,212	+\$2,067,758	+0.36

## GOODS MADE: BY INDUSTRIES.

1903, 1904.

[In this presentation, the figures given under "Value of Goods Made and Work Done" represent the returns made by the same establishments, in each industry, for the years 1903 and 1904, the whole number of establishments considered in "All Industries" being 4,730. The relative increases or decreases in 1904 as compared with 1903 are given with equivalent percentages. These percentages, based upon returns from 4,730 identical establishments, may be considered a fair indication of the increase or decrease in value of product in the various industries for *all* the establishments in the State.]

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	VALUE OF GOODS MADE AND WORK DONE		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percent- ages
Agricultural implements, . . .	8	\$1,547,702	\$1,526,096	-\$21,606	-1.40
Arms and ammunition, . . .	13	4,324,366	5,072,496	+748,130	+17.30
Artisans' tools, . . .	74	6,129,975	5,987,342	-142,633	-2.33
Awnings, sails, tents, etc., . .	34	765,647	737,862	-27,785	-3.63
Bicycles, tricycles, etc., . . .	6	944,795	968,509	+23,714	+2.51
Boots and shoes, . . .	656	159,983,193	165,709,642	+5,726,449	+3.58
Boots and shoes (factory prod- uct), . . .	390	135,682,931	140,544,155	+4,861,224	+3.58
Soles, heels, and cut stock, . .	200	21,130,992	21,712,962	+581,970	+2.75
Boot and shoe findings, . . .	44	2,760,831	3,048,958	+288,127	+10.44
Stitching, heelings, etc., . . .	22	408,439	403,567	-4,872	-1.19
Boxes, barrels, kegs, etc., . . .	122	7,782,156	8,236,819	+454,663	+5.84
Boxes (paper), . . .	71	3,488,123	3,486,069	-2,054	-0.06
Brick, tiles, and sewer pipe, . .	63	1,651,480	1,428,425	-223,055	-13.51
Brooms, brushes, and mops, . .	33	2,657,497	2,407,161	-249,664	-9.37
Building materials, . . .	46	2,978,236	2,768,797	-209,439	-7.03
Burial cases, caskets, coffins, etc.,	3	336,114	378,169	+42,055	+12.51
Buttons and dress trimmings, . .	9	431,738	491,336	+59,598	+13.80
Carpetings, . . .	10	11,209,336	9,654,392	-1,554,944	-13.87
Carriages and wagons, . . .	107	5,006,722	5,356,767	+350,045	+6.99
Cement, kaolin, lime, and plaster,	13	537,134	624,390	+87,256	+16.24
Chemical preparations (com- pounded), . . .	12	2,130,057	2,295,097	+165,040	+7.75
Clocks and watches, . . .	11	4,312,731	4,556,514	+243,783	+5.65
Clothing, . . .	155	26,470,814	27,547,808	+1,076,994	+4.07
Cooking, lighting, and heating ap- paratus, . . .	39	4,372,830	4,957,508	+584,678	+13.37
Cordage and twine, . . .	24	10,613,845	11,891,416	+1,277,571	+12.04
Cotton goods, . . .	166	134,741,484	132,564,840	-2,176,644	-1.62
Cotton goods (woven), . . .	124	112,221,455	109,566,528	-2,654,927	-2.37
Cotton yarn and thread, . . .	35	20,176,016	20,370,901	+194,885	+0.97
Cotton waste, . . .	7	2,344,013	2,627,411	+283,398	+12.09
Crayons, pencils, crucibles, etc., .	5	192,780	153,108	-39,672	-20.58
Drugs and medicines, . . .	30	5,842,298	5,803,737	-38,561	-0.66
Dyestuffs, . . .	6	533,276	530,337	-2,939	-0.55
Earthen, plaster, and stone ware,	11	341,182	368,785	+27,603	+8.09
Electrical apparatus and appli- ances, . . .	24	13,066,277	13,812,827	+746,550	+5.71
Electroplating, . . .	10	223,601	259,823	+36,222	+16.20
Emery and sand paper and cloth, etc., . . .	8	1,086,165	1,046,091	-40,074	-3.69
Fancy articles, etc., . . .	16	1,372,606	1,234,164	-138,442	-10.09
Fertilizers, . . .	6	1,667,892	1,860,802	+192,910	+11.57
Fine arts and taxidermy, . . .	3	50,049	37,215	-12,834	-25.64
Fireworks and matches, . . .	3	160,084	203,405	+43,321	+27.06
Flax, hemp, and jute goods, . . .	9	5,995,009	6,938,970	+943,961	+15.75



## GOODS MADE: BY INDUSTRIES—1903, 1904—Concluded.

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	VALUE OF GOODS MADE AND WORK DONE		INCREASE (+) OR DECREASE (—) IN 1904	
		1903	1904	Amounts	Percent- ages
Food preparations, . . . . .	333	\$79 750,540	\$78,356,189	—\$1,394,351	—1.75
Furniture, . . . . .	138	14,306,379	13,237,741	—1,068,638	—7.47
Glass, . . . . .	13	488,725	440,971	—47,754	—9.77
Glue, isinglass, and starch, . . . .	16	1,102,150	1,379,883	+277,733	+25.20
Hair work (animal and human), . .	4	232,300	202,675	—29,625	—12.75
Hose and belting: rubber, linen, etc., . . . . .	7	530,197	552,434	+22,237	+4.19
Hosiery and knit goods, . . . .	38	8,814,096	9,293,041	+478,945	+5.43
Ink, mucilage, and paste, . . . .	8	647,317	707,826	+60,509	+9.35
Ivory, bone, shell, and horn goods, etc., . . . . .	31	3,295,890	3,723,915	+428,025	+12.99
Jewelry, . . . . .	105	10,752,071	9,942,837	—809,234	—7.53
Leather, . . . . .	105	29,719,280	29,228,192	—491,088	—1.65
Leather goods, . . . . .	31	4,758,193	4,317,727	—440,466	—9.26
Liquors (bottled) and carbonated beverages, . . . . .	25	836,431	860,908	+24,537	+2.93
Liquors (malt), . . . . .	39	11,706,783	10,952,251	—754,532	—6.45
Liquors (distilled), . . . . .	6	2,982,573	2,671,373	—311,200	—10.43
Lumber, . . . . .	21	3,393,093	2,986,907	—406,186	—11.97
Machines and machinery, . . . .	375	58,484,782	51,942,230	—6,542,552	—11.19
Metals and metallic goods, . . . .	393	49,207,591	44,760,700	—4,446,891	—9.04
Models, lasts, and patterns, . . . .	44	1,356,277	1,580,959	+224,682	+16.57
Musical instruments and materials, .	51	9,060,140	7,706,016	—1,354,124	—14.95
Oils and illuminating fluids, . . . .	11	2,236,882	1,905,829	—331,553	—14.82
Paints, colors, and crude chemicals, .	27	1,740,200	1,655,547	—84,653	—4.86
Paper, . . . . .	81	30,202,100	31,921,767	+1,719,667	+5.69
Paper goods, . . . . .	43	9,596,555	9,641,584	+45,029	+0.47
Photographs and photographic ma- terials, . . . . .	13	341,082	316,318	—24,764	—7.26
Polishes and dressing, . . . . .	42	2,921,235	3,241,556	+320,321	+10.97
Printing, publishing, and book- binding, . . . . .	63	10,674,690	11,331,467	+656,777	+6.15
Print works, dye works, and bleacheries, . . . . .	46	34,448,646	27,910,108	—6,538,538	—18.98
Railroad construction and equip- ment, . . . . .	19	6,075,300	6,920,344	+845,044	+13.91
Rubber and elastic goods, . . . .	46	48,593,121	53,421,494	+4,828,373	+9.94
Saddlery and harness, . . . . .	20	1,237,508	1,076,152	—161,356	—13.04
Scientific instruments and appli- ances, . . . . .	18	3,254,300	2,903,215	—351,085	—10.79
Shipbuilding, . . . . .	40	1,862,237	1,611,753	—250,484	—13.45
Silk and silk goods, . . . . .	13	6,333,916	6,445,905	+111,989	+1.77
Sporting and athletic goods, . . . .	13	1,737,260	1,772,857	+35,597	+2.05
Stone, . . . . .	185	6,227,078	6,174,790	—52,288	—0.84
Quarried, . . . . .	46	2,289,801	2,268,740	—21,061	—0.92
Cut and monumental, . . . . .	139	3,937,277	3,906,050	—31,227	—0.79
Straw and palm leaf goods, . . . .	18	5,999,434	6,174,131	+174,697	+2.91
Tallow, candles, soap, and grease, .	48	4,969,167	4,988,887	+19,720	+0.40
Tobacco, snuff, and cigars, . . . .	84	5,371,677	5,465,722	+94,045	+1.75
Toys and games (children's), . . . .	10	1,022,858	1,029,137	+6,279	+0.61
Trunks and valises, . . . . .	8	369,368	435,623	+66,255	+17.94
Whips, lashes, and stocks, . . . .	16	1,983,262	1,901,019	—82,243	—4.15
Wooden goods, . . . . .	74	2,353,447	2,542,902	+189,455	+8.05
Woolen goods, . . . . .	160	56,893,318	54,501,657	—2,391,661	—4.20
Woven goods and yarn, . . . . .	132	54,510,972	51,993,892	—2,517,080	—4.62
Shoddy, waste, etc., . . . . .	28	2,382,346	2,507,765	+125,419	+5.26
Worsted goods, . . . . .	43	46,032,840	46,426,816	+393,976	+0.86
ALL INDUSTRIES, . . . . .	4,730	\$1,006,549,483	\$997,457,634	—\$9,091,849	—0.90

*Analysis.*

On pages 320 and 321 presentation of the figures representing capital devoted to production, in 1903 appears, together with the results of the Census inquiry regarding capital invested for identical establishments in 1904. As stated in the remarks on Capital, page 319, there can be no comparison between figures secured on such dissimilar bases. To demonstrate this fact, take for example the first industry, Agricultural Implements. Under the State classification, the amount of capital devoted to production in eight establishments is found to be \$996,470 in 1903; in 1904, in the same establishments, under the Census classification, a capital invested of \$3,085,643 appears. That the figures in the latter year are abnormal throughout the table is at once apparent if the capital invested in the various industries be considered in relation to the cost of stock used and the value of product turned out in them, as presented on pages 322 to 325, it being understood that the figures for the last two elements are the same whether under the State or the Census classification.

The presentation on pages 322 and 323 shows value of stock used in the 4,730 establishments reporting for the years 1903 and 1904. The total cost value of stock used in the 4,730 establishments considered amounted to \$568,141,454 in 1903 and \$570,209,212 in 1904, an increase of \$2,067,758, or 0.36 per cent. The data for the nine leading industries are brought forward in the following table:

INDUSTRIES.	Number of Establishments Considered	VALUE OF STOCK USED		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percent-ages
Boots and shoes (aggregate), . . . . .	656	\$100,737,707	\$103,916,188	+\$3,178,481	+3.16
Factory product, . . . . .	390	82,945,622	85,332,635	+2,387,013	+2.88
Soles, heels, and cut stock, . . . . .	200	16,115,947	16,576,615	+460,668	+2.86
Findings, . . . . .	44	1,610,486	1,954,067	+343,581	+21.33
Stitching, beeling, etc., . . . . .	22	65,652	52,871	-12,781	-19.47
Carpetings, . . . . .	10	6,844,167	6,818,838	-25,329	-0.37
Cotton goods (aggregate), . . . . .	166	78,274,573	82,407,903	+4,133,330	+5.28
Woven goods, . . . . .	124	63,569,056	68,035,638	+4,466,582	+7.03
Yarn and thread, . . . . .	35	12,681,560	12,203,402	-478,158	-3.77
Waste, . . . . .	7	2,023,957	2,168,863	+144,906	+7.16
Leather, . . . . .	105	20,846,121	20,548,240	-297,881	-1.43
Machines and machinery, . . . . .	375	22,952,922	20,240,029	-2,712,893	-11.82
Metals and metallic goods, . . . . .	393	26,017,516	21,771,869	-4,245,647	-16.32
Paper, . . . . .	81	16,953,773	17,737,702	+783,929	+4.62



INDUSTRIES.	Number of Establishments Considered	VALUE OF STOCK USED		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percentages
Woolen goods (aggregate), . . .	160	\$31,975,672	\$32,439,770	+\$464,098	+1.45
Woven goods and yarn, . . .	132	30,545,694	30,961,907	+416,213	+1.36
Shoddy, waste, etc., . . .	28	1,429,978	1,477,863	+47,885	+3.35
Worsted goods, . . .	43	26,763,110	30,668,362	+3,905,252	+14.59
Nine industries, . . . . .	1,989	331,365,561	336,548,901	+5,183,340	+1.56
Other industries, . . . . .	2,741	236,775,893	233,660,311	-3,115,582	-1.32
All industries, . . . . .	4,730	568,141,454	570,209,212	+2,067,758	+0.36

From the preceding figures it will be seen that of the nine leading industries, Boots and Shoes shows greatest value of stock used, the figures for 1904 being \$103,916,188 as against \$100,737,707 in 1903, the increase being \$3,178,481, or 3.16 per cent. Other industries showing increase in value of stock used are Cotton Goods, in which the total cost value of stock in 1903 was \$78,274,573 as against \$82,407,903 in 1904, an increase of \$4,133,330, or 5.28 per cent; Paper, the increase for 1904 being 4.62 per cent as compared with 1903; Woolen Goods, showing an increase of 1.45 per cent, and Worsted Goods, an increase of 14.59 per cent.

Industries showing decrease in value of stock used are: Carpetings, Leather, Machines and Machinery, and Metals and Metallic Goods, the percentages of decrease being 0.37, 1.43, 11.82, and 16.32, respectively.

In the aggregate, the value of stock used in the nine leading industries was \$331,365,561 in 1903 and \$336,548,901 in 1904, an increase of \$5,183,340, or 1.56 per cent; while for industries other than the nine a decrease appears, amounting to \$3,115,582, or 1.32 per cent.

The presentation on pages 324 and 325 shows the value of goods made and work done in the 4,730 establishments considered. The final line of the table shows a product value for 1903 of \$1,006,549,483, which fell in 1904 to \$997,457,634, a decline of \$9,091,849, or 0.90 per cent. The facts for the nine leading industries are brought together in the following table:

INDUSTRIES.	Number of Establishments (considered)	VALUE OF GOODS MADE AND WORK DONE		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percentages
Boots and shoes (aggregate), . . .	656	\$159,983,193	\$165,709,642	+\$5,726,449	+3.58
Factory product, . . . . .	390	135,682,931	140,544,155	+4,861,224	+3.58
Soles, heels, and cut stock, . . .	200	21,130,992	21,712,962	+581,970	+2.75
Findings, . . . . .	44	2,760,831	3,048,958	+288,127	+10.44
Stitching, heeling, etc., . . . .	22	408,439	403,567	-4,872	-1.19
Carpetings, . . . . .	10	11,209,336	9,654,392	-1,554,944	-13.87
Cotton goods (aggregate), . . . .	166	134,741,484	132,564,840	-2,176,644	-1.62
Woven goods, . . . . .	124	112,221,455	109,566,528	-2,654,927	-2.37
Yarn and thread, . . . . .	35	20,176,016	20,370,901	+194,885	+0.97
Waste, . . . . .	7	2,344,013	2,627,411	+283,398	+12.09
Leather, . . . . .	105	29,719,280	29,228,192	-491,088	-1.65
Machines and machinery, . . . .	375	58,484,782	51,942,230	-6,542,552	-11.19
Metals and metallic goods, . . .	393	49,207,591	44,760,700	-4,446,891	-9.04
Paper, . . . . .	81	30,202,100	31,921,767	+1,719,667	+5.69
Woolen goods (aggregate), . . .	160	56,893,318	54,501,657	-2,391,661	-4.20
Woven goods and yarn, . . . .	132	54,510,972	51,993,892	-2,517,080	-4.62
Shoddy, waste, etc., . . . . .	28	2,382,346	2,507,765	+125,419	+5.26
Worsted goods, . . . . .	43	46,032,840	46,426,816	+393,976	+0.86
Nine industries, . . . . .	1,989	576,473,924	566,710,236	-9,763,688	-1.69
Other industries, . . . . .	2,741	430,075,559	430,747,398	+671,839	+0.16
All industries, . . . . .	4,730	1,006,549,483	997,457,634	-9,091,849	-0.90

The fact that the year 1904 was one of great depression in the industrial field is at once apparent from the figures in the above table. Of the nine leading industries, those showing increased value of product in 1904 as compared with 1903 are Boots and Shoes, Paper, and Worsted Goods. In Boots and Shoes, representing the returns of 656 establishments, the value of goods produced in 1903 amounted to \$159,983,193, rising in 1904 to \$165,709,642, a gain of \$5,726,449, or 3.58 per cent. Of this amount, nearly seven-eighths is the direct product of boot and shoe factories, the remainder being the output of establishments engaged in the manufacture of boot and shoe cut stock, findings, etc. In Paper, the value of product turned out in 1903 was \$30,202,100 as against \$31,921,767 in 1904, an increase of \$1,719,667, or 5.69 per cent, and in Worsted Goods a slight increase appears, the figures for 1903 being \$46,032,840 as against \$46,426,816 in 1904, a gain of \$393,976, or 0.86 per cent.

In Boots and Shoes as well as in Cotton Goods, Massachusetts holds first place among the States of the Union, and is so far in advance of any other State that the returns for the forthcoming Census will doubtless show unchanged rank in this respect. Cotton Goods, however, shows decrease in value of product in 1904, the aggregate output in that year being

\$132,564,840 as against \$134,741,484 in 1903, a decrease of \$2,176,644, or 1.62 per cent.

Further inspection of the figures shows a decrease in Carpets of 13.87 per cent; in Leather, 1.65 per cent; in Machines and Machinery, a decline from a product value of \$58,484,782 in 1903 to \$51,942,230 in 1904, a decrease of \$6,542,552, or 11.19 per cent; in Metals and Metallic Goods a decline from \$49,207,591 to \$44,760,700, the decrease being \$4,446,891, or 9.04 per cent; and in Woolen Goods, in the aggregate, a decline of 4.20 per cent is noted.

For the nine leading industries, in the aggregate, the value of product in 1904 was \$566,710,236 as against \$576,473,924 in 1903, a decline of \$9,763,688, or 1.69 per cent. For industries other than the nine, 2,741 establishments being represented, a slight increase appears, the value of product turned out in these establishments being \$430,075,559 in 1903 as against \$430,747,398 in 1904, a gain of \$671,839, or 0.16 per cent.

### Labor and its Compensation.

The statistical presentations under this subject head cover the number of persons employed for 1903 and 1904 in the 4,730 establishments under consideration, together with the amount of wages paid and the classified weekly wages. They are arranged as follows :

1. The average number of persons employed, both sexes, with increase or decrease in 1904 as compared with 1903 in numbers and percentages.

2. The average number of persons employed, together with the number employed at periods of employment of the smallest and greatest numbers, respectively, in 1903 and 1904.

3. The range of employment and unemployment as indicated by the excess of greatest over smallest number employed, for each industry and for All Industries, with increase or decrease in 1904 as compared with 1903 in numbers and percentages.

4. The aggregate number of persons employed, both sexes, month by month, and the percentages of employment and unemployment for the nine leading industries and for All Industries.

5. The total amount paid in wages, by industries, for 1903 and 1904, with increase or decrease in amounts and percentages in the later as compared with the earlier year.

6. Average yearly earnings for 79 classified industries and for All Industries, for 1903 and 1904, with increase or decrease in amounts and percentages.

7. Classified weekly wages for the nine leading industries and for All Industries, showing the number of adult males and females and the young persons receiving certain specified sums per week ranging from under \$5 to \$20 and over.



## AVERAGE NUMBER OF PERSONS EMPLOYED—BOTH SEXES: BY INDUSTRIES.

**1903, 1904.**

[In this presentation, the average number of persons employed without regard to sex is shown, by industries, for the years 1903 and 1904. The increases or decreases in 1904 as compared with 1903 are given in numbers and percentages. It should be borne in mind that the persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	AVERAGE NUMBER OF PERSONS EMPLOYED: BOTH SEXES		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percent- ages
Agricultural implements, . . . . .	8	768	753	-15	-1.95
Arms and ammunition, . . . . .	13	3,123	3,257	+134	+4.29
Artisans' tools, . . . . .	74	3,896	3,505	-391	-10.04
Awnings, sails, tents, etc., . . . . .	34	312	305	-7	-2.24
Bicycles, tricycles, etc., . . . . .	6	619	457	-162	-26.17
Boots and shoes, . . . . .	656	66,797	66,692	-105	-0.16
Boots and shoes (factory product), . . . . .	390	60,072	59,905	-167	-0.28
Soles, heels, and cut stock, . . . . .	200	4,948	4,941	-7	-0.14
Boot and shoe findings, . . . . .	44	1,158	1,167	+9	+0.78
Stitching, heeling, etc., . . . . .	22	619	679	+60	+9.69
Boxes, barrels, kegs, etc., . . . . .	122	3,878	3,871	-7	-0.18
Boxes (paper), . . . . .	71	2,799	2,835	+36	+1.29
Brick, tiles, and sewer pipe, . . . . .	63	1,391	1,288	-103	-7.40
Brooms, brushes, and mops, . . . . .	33	1,449	1,364	-85	-5.87
Building materials, . . . . .	46	1,175	1,152	-23	-1.96
Burial cases, caskets, coffins, etc., . . . . .	3	184	179	-5	-2.72
Buttons and dress trimmings, . . . . .	9	366	346	-20	-5.46
Carpets, . . . . .	10	5,062	4,774	-288	-5.69
Carriages and wagons, . . . . .	107	2,344	2,557	+213	+9.09
Cement, kaolin, lime, and plaster, . . . . .	13	199	240	+41	+20.60
Chemical preparations (com- pounded), . . . . .	12	574	569	-5	-0.87
Clocks and watches, . . . . .	11	4,244	4,228	-16	-0.38
Clothing, . . . . .	155	11,971	12,048	+77	+0.64
Cooking, lighting, and heating ap- paratus, . . . . .	39	2,144	2,171	+27	+1.26
Cordage and twine, . . . . .	24	2,860	3,141	+281	+9.83
Cotton goods, . . . . .	166	94,270	88,138	-6,132	-6.50
Cotton goods (woven), . . . . .	124	82,451	77,170	-5,281	-6.41
Cotton yarn and thread, . . . . .	35	11,404	10,516	-888	-7.79
Cotton waste, . . . . .	7	415	452	+37	+8.92
Crayons, pencils, crucibles, etc., . . . . .	5	97	61	-36	-37.11
Drugs and medicines, . . . . .	30	947	926	-21	-2.22
Dyestuffs, . . . . .	6	118	112	-6	-5.08
Earthen, plaster, and stone ware, . . . . .	11	234	207	-27	-11.54
Electrical apparatus and appliances, . . . . .	24	8,209	7,832	-377	-4.59
Electroplating, . . . . .	10	136	150	+14	+10.29
Emery and sand paper and cloth, etc., . . . . .	8	435	410	-25	-5.75
Fancy articles, etc., . . . . .	16	722	718	-4	-0.55
Fertilizers, . . . . .	6	267	353	+86	+32.21
Fine arts and taxidermy, . . . . .	3	28	22	-6	-21.43
Fireworks and matches, . . . . .	3	96	100	+4	+4.17
Flax, hemp, and jute goods, . . . . .	9	3,265	3,532	+267	+8.18

**AVERAGE NUMBER OF PERSONS EMPLOYED—BOTH SEXES:  
BY INDUSTRIES—1903, 1904—Concluded.**

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	AVERAGE NUMBER OF PERSONS EMPLOYED: BOTH SEXES		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percent- ages
Food preparations, . . . . .	333	11,193	11,681	+488	+4.36
Furniture, . . . . .	138	7,190	6,873	-317	-4.41
Glass, . . . . .	13	349	292	-57	-16.33
Glue, isinglass, and starch, . . . . .	16	252	255	+3	+1.19
Hair work (animal and human), . . . . .	4	87	71	-16	-18.39
Hose and belting: rubber, linen, etc., . . . . .	7	112	96	-16	-14.29
Hosiery and knit goods, . . . . .	38	7,916	7,785	-131	-1.65
Ink, mucilage, and paste, . . . . .	8	115	140	+25	+21.74
Ivory, bone, shell, and horn goods, etc., . . . . .	31	1,833	2,161	+328	+17.89
Jewelry, . . . . .	105	5,724	5,441	-283	-4.94
Leather, . . . . .	105	7,200	7,695	+495	+6.88
Leather goods, . . . . .	31	1,628	1,575	-53	-3.26
Liquors (bottled) and carbonated beverages, . . . . .	25	199	229	+30	+15.08
Liquors (malt), . . . . .	39	1,437	1,514	+77	+5.36
Liquors (distilled), . . . . .	6	28	31	+3	+10.71
Lumber, . . . . .	21	787	681	-106	-13.47
Machines and machinery, . . . . .	375	32,491	29,520	-2,971	-9.14
Metals and metallic goods, . . . . .	393	24,024	21,411	-2,613	-10.88
Models, lasts, and patterns, . . . . .	44	639	666	+27	+4.23
Musical instruments and materials, . . . . .	51	4,111	3,900	-211	-5.13
Oils and illuminating fluids, . . . . .	11	192	182	-10	-5.21
Paints, colors, and crude chemicals, Paper, . . . . .	27	258	257	-1	-0.39
Paper goods, . . . . .	43	10,964	11,542	+578	+5.27
Photographs and photographic ma- terials, . . . . .	43	4,222	4,243	+21	+0.50
Polishes and dressing, . . . . .	13	166	154	-12	-7.23
Printing, publishing, and bookbind- ing, . . . . .	42	385	394	+9	+2.34
Print works, dye works, and bleach- eries, . . . . .	63	5,140	5,139	-1	-0.02
Railroad construction and equip- ment, . . . . .	46	7,818	7,323	-495	-6.33
Rubber and elastic goods, . . . . .	19	3,454	4,388	+934	+27.04
Saddlery and harness, . . . . .	46	12,440	12,531	+91	+0.73
Scientific instruments and appli- ances, . . . . .	20	451	420	-31	-6.87
Shipbuilding, . . . . .	18	2,326	2,079	-247	-10.62
Silk and silk goods, . . . . .	40	982	853	-129	-13.14
Sporting and athletic goods, . . . . .	13	3,125	3,011	-114	-3.65
Stone, . . . . .	13	946	977	+31	+3.28
Quarried, . . . . .	185	4,772	4,751	-21	-0.44
Cut and ornamental, . . . . .	46	2,407	2,454	+47	+1.95
Straw and palm leaf goods, . . . . .	139	2,365	2,297	-68	-2.88
Tallow, candles, soap, and grease, . . . . .	18	2,965	3,100	+135	+4.55
Tobacco, snuff, and cigars, . . . . .	48	949	932	-17	-1.79
Toys and games (children's), . . . . .	84	2,981	3,098	+117	+3.92
Trunks and valises, . . . . .	10	782	815	+33	+4.22
Whips, lashes, and stocks, . . . . .	8	183	188	+5	+2.73
Wooden goods, . . . . .	16	769	792	+23	+2.99
Woolen goods, . . . . .	74	1,541	1,464	-77	-5.00
Woven goods and yarn, . . . . .	160	26,659	26,178	-481	-1.80
Shoddy, waste, etc., . . . . .	132	25,757	25,321	-436	-1.69
Worsteds, . . . . .	28	902	857	-45	-4.99
ALL INDUSTRIES, . . . . .	43	18,805	18,262	-543	-2.89
ALL INDUSTRIES, . . . . .	4,730	445,569	433,383	-12,186	-2.73



# SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS EMPLOYED: BY INDUSTRIES.

1903, 1904.

[This presentation shows the average number of persons employed, and the number of persons employed at periods of employment of smallest and greatest number, respectively. It should be borne in mind that the persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

INDUSTRIES.	1903			1904		
	Average Number	Small- est Number	Great- est Number	Average Number	Small- est Number	Great- est Number
Agricultural implements, . . . . .	768	687	836	753	668	833
Arms and ammunition, . . . . .	3,123	2,744	3,663	3,257	2,570	3,903
Artisans' tools, . . . . .	3,896	3,462	4,237	3,505	3,144	3,860
Awnings, sails, tents, etc., . . . . .	312	232	406	305	200	448
Bicycles, tricycles, etc., . . . . .	619	294	920	457	249	766
Boots and shoes, . . . . .	66,797	55,582	76,547	66,692	54,712	77,863
Boots and shoes (factory product), . . . . .	60,072	49,985	68,710	59,905	49,209	69,813
Soles, heels, and cut stock, . . . . .	4,948	4,132	5,715	4,941	4,004	5,886
Boot and shoe findings, . . . . .	1,158	975	1,365	1,167	968	1,374
Stitching, heeling, etc., . . . . .	619	490	757	679	531	790
Boxes, barrels, kegs, etc., . . . . .	3,878	3,438	4,341	3,871	3,402	4,323
Boxes (paper), . . . . .	2,799	2,413	3,254	2,835	2,382	3,227
Brick, tiles, and sewer pipe, . . . . .	1,391	695	2,526	1,283	653	2,299
Brooms, brushes, and mops, . . . . .	1,449	1,308	1,596	1,364	1,195	1,503
Building materials, . . . . .	1,175	1,000	1,382	1,152	904	1,387
Burial cases, caskets, coffins, etc., . . . . .	184	169	195	179	168	184
Buttons and dress trimmings, . . . . .	366	239	437	346	255	428
Carpetings, . . . . .	5,062	4,685	5,197	4,774	4,213	5,048
Carriages and wagons, . . . . .	2,344	1,678	2,889	2,557	2,003	3,225
Cement, kaolin, lime, and plaster, . . . . .	199	158	240	240	186	301
Chemical preparations (compounded), . . . . .	574	539	611	569	521	599
Clocks and watches, . . . . .	4,244	4,021	4,402	4,228	3,990	4,415
Clothing, . . . . .	11,971	9,562	13,627	12,048	10,138	13,909
Cooking, lighting, and heating apparatus, . . . . .	2,144	1,870	2,444	2,171	1,912	2,462
Cordage and twine, . . . . .	2,860	2,623	3,076	3,141	2,738	3,651
Cotton goods, . . . . .	94,270	80,381	101,613	88,138	77,728	99,196
Cotton goods (woven), . . . . .	82,451	69,966	88,975	77,170	67,704	87,053
Cotton yarn and thread, . . . . .	11,404	10,031	12,194	10,516	9,618	11,657
Cotton waste, . . . . .	415	384	444	452	406	486
Crayons, pencils, crucibles, etc., . . . . .	97	69	120	61	47	80
Drugs and medicines, . . . . .	947	601	1,237	926	707	1,199
Dyestuffs, . . . . .	118	81	136	112	70	139
Earthen, plaster, and stone ware, . . . . .	234	211	260	207	179	237
Electrical apparatus and appliances, . . . . .	8,209	7,162	9,132	7,832	6,617	9,190
Electroplating, . . . . .	136	116	168	150	123	172
Emery and sandpaper and cloth, etc., . . . . .	435	406	469	410	365	475
Fancy articles, etc., . . . . .	722	454	1,081	718	462	1,047
Fertilizers, . . . . .	267	209	353	353	249	519
Fine arts and taxidermy, . . . . .	28	27	33	22	20	23
Fireworks and matches, . . . . .	96	63	136	100	60	143
Flax, hemp, and jute goods, . . . . .	3,265	2,978	3,408	3,532	3,355	3,744

**SMALLEST, GREATEST, AND AVERAGE NUMBER OF PERSONS  
EMPLOYED: BY INDUSTRIES — 1903, 1904 — Concluded.**

INDUSTRIES	1903			1904		
	Average Number	Small- est Number	Great- est Number	Average Number	Small- est Number	Great- est Number
Food preparations, . . . . .	11,193	8,998	12,978	11,681	9,653	13,901
Furniture, . . . . .	7,190	6,338	8,128	6,873	6,072	7,687
Glass, . . . . .	349	294	394	292	245	365
Glue, isinglass, and starch, . . . . .	252	148	334	255	158	323
Hair work (animal and human), . . . . .	87	79	95	71	64	77
Hose and belting: rubber, linen, etc., . . . . .	112	106	118	96	76	110
Hosiery and knit goods, . . . . .	7,916	7,263	8,604	7,785	7,165	8,454
Ink, mucilage, and paste, . . . . .	115	97	129	140	120	154
Ivory, bone, shell, and horn goods, etc., . . . . .	1,833	1,554	2,197	2,161	1,786	2,570
Jewelry, . . . . .	5,724	4,656	6,778	5,441	4,463	6,532
Leather, . . . . .	7,200	6,017	8,304	7,695	6,456	8,975
Leather goods, . . . . .	1,628	1,459	1,817	1,575	1,431	1,737
Liquors (bottled) and carbonated beverages, . . . . .	199	142	297	229	161	316
Liquors (malt), . . . . .	1,437	1,333	1,525	1,514	1,403	1,619
Liquors (distilled), . . . . .	28	26	34	31	29	37
Lumber, . . . . .	787	639	994	681	498	901
Machines and machinery, . . . . .	32,491	27,667	36,706	29,520	24,669	34,291
Metals and metallic goods, . . . . .	24,024	20,640	26,941	21,411	17,860	24,464
Models, lasts, and patterns, . . . . .	639	544	768	666	535	823
Musical instruments and materials, . . . . .	4,111	3,571	4,587	3,900	3,431	4,268
Oils and illuminating fluids, . . . . .	192	169	216	182	164	204
Paints, colors, and crude chemicals, . . . . .	258	240	274	257	230	286
Paper, . . . . .	10,964	8,249	12,159	11,542	10,480	12,301
Paper goods, . . . . .	4,222	3,638	4,616	4,243	3,688	4,609
Photographs and photographic materials, . . . . .	166	144	187	154	125	181
Polishes and dressing, . . . . .	385	306	447	394	340	446
Printing, publishing, and bookbinding, . . . . .	5,140	4,638	5,650	5,139	4,762	5,549
Print works, dye works, and bleacheries, . . . . .	7,818	7,115	8,404	7,323	6,361	8,081
Railroad construction and equipment, . . . . .	3,454	3,224	3,689	4,388	3,719	4,816
Rubber and elastic goods, . . . . .	12,440	11,350	13,347	12,531	11,062	13,634
Saddlery and harness, . . . . .	451	384	495	420	336	479
Scientific implements and appliances, . . . . .	2,326	2,009	2,500	2,079	1,915	2,272
Shipbuilding, . . . . .	982	612	1,330	853	566	1,236
Silk and silk goods, . . . . .	3,125	2,857	3,311	3,011	2,757	3,187
Sporting and athletic goods, . . . . .	946	753	1,116	977	735	1,160
Stone, . . . . .	4,772	3,322	6,250	4,751	3,092	6,387
Quarried, . . . . .	2,407	1,592	3,318	2,454	1,421	3,470
Cut and monumental, . . . . .	2,365	1,730	2,932	2,297	1,671	2,917
Straw and palm leaf goods, . . . . .	2,965	1,008	4,600	3,100	1,148	4,684
Tallow, candles, soap, and grease, . . . . .	949	827	1,114	932	823	1,097
Tobacco, snuff, and cigars, . . . . .	2,981	2,482	3,436	3,098	2,547	3,557
Toys and games (children's), . . . . .	782	523	1,021	815	551	1,044
Trunks and valises, . . . . .	183	137	213	188	117	222
Whips, lashes, and stocks, . . . . .	769	699	845	792	740	844
Wooden goods, . . . . .	1,541	1,304	1,741	1,464	1,241	1,707
Woolen goods, . . . . .	26,659	22,692	29,462	26,178	22,354	28,746
Woven goods and yarn, . . . . .	25,757	22,006	28,322	25,321	21,676	27,703
Shoddy, waste, etc., . . . . .	902	686	1,140	857	678	1,043
Worsted goods, . . . . .	18,805	16,461	21,090	18,262	15,372	20,983
ALL INDUSTRIES, . . . . .	445,569	376,921	500,213	433,383	367,685	496,114

# RANGE OF EMPLOYMENT AND UNEMPLOYMENT: BY INDUSTRIES.

## 1903, 1904.

[In this presentation, the excess of greatest over smallest number of persons, as obtained from the table on pages 333 and 334, is shown, and a comparison is made between the two years. The relative increases or decreases in the excess of greatest over smallest number employed in 1904 as compared with 1903 are given with equivalent percentages. It should be borne in mind that the persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included.]

INDUSTRIES.	Number of Establishments Considered	EXCESS OF GREATEST OVER SMALLEST NUMBER OF PERSONS EMPLOYED		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Number	Percentages
Agricultural implements, . . .	8	149	165	+16	+10.74
Arms and ammunition, . . .	13	919	1,333	+414	+45.05
Artisans' tools, . . .	74	775	716	-59	-7.61
Awnings, sails, tents, etc., . . .	34	174	248	+74	+42.53
Bicycles, tricycles, etc., . . .	6	626	517	-109	-17.41
Boots and shoes, . . .	656	20,965	23,151	+2,186	+10.43
Boots and shoes (factory product), . . .	390	18,725	20,604	+1,879	+10.03
Soles, heels, and cut stock, . . .	200	1,583	1,882	+299	+18.89
Boot and shoe findings, . . .	44	390	406	+16	+4.10
Stitching, heeling, etc., . . .	22	267	259	-8	-3.00
Boxes, barrels, kegs, etc., . . .	122	903	921	+18	+1.99
Boxes (paper), . . .	71	841	845	+4	+0.48
Brick, tiles, and sewer pipe, . . .	63	1,831	1,646	-185	-10.10
Brooms, brushes, and mops, . . .	33	288	308	+20	+6.94
Building materials, . . .	46	382	483	+101	+26.44
Burial cases, caskets, coffins, etc., . . .	3	26	16	-10	-38.46
Buttons and dress trimmings, . . .	9	148	173	+25	+16.89
Carpetings, . . .	10	512	835	+323	+63.09
Carriages and wagons, . . .	107	1,211	1,222	+11	+0.91
Cement, kaolin, lime, and plaster, . . .	13	82	115	+33	+40.24
Chemical preparations (compounded), . . .	12	72	78	+6	+8.33
Clocks and watches, . . .	11	381	425	+44	+11.55
Clothing, . . .	155	4,065	3,771	-294	-7.23
Cooking, lighting, and heating apparatus, . . .	39	574	550	-24	-4.18
Cordage and twine, . . .	24	453	913	+460	+101.55
Cotton goods, . . .	166	21,232	21,468	+236	+1.11
Cotton goods (woven), . . .	124	19,009	19,349	+340	+1.79
Cotton yarn and thread, . . .	35	2,163	2,039	-124	-5.73
Cotton waste, . . .	7	60	80	+20	+33.33
Crayons, pencils, crucibles, etc., . . .	5	51	33	-18	-35.29
Drugs and medicines, . . .	30	636	492	-144	-22.64
Dyestuffs, . . .	6	55	69	+14	+25.45
Earthen, plaster, and stone ware, . . .	11	49	58	+9	+18.37
Electrical apparatus and appliances, . . .	24	1,970	2,573	+603	+30.61
Electroplating, . . .	10	52	49	-3	-5.77
Emery and sand paper and cloth, etc., . . .	8	63	110	+47	+74.60
Fancy articles, etc., . . .	16	627	585	-42	-6.70
Fertilizers, . . .	6	144	270	+126	+87.50
Fine arts and taxidermy, . . .	3	6	3	-3	-50.00
Fireworks and matches, . . .	3	73	83	+10	+13.70
Flax, hemp, and jute goods, . . .	9	430	389	-41	-9.53

**RANGE OF EMPLOYMENT AND UNEMPLOYMENT: BY INDUSTRIES — 1903, 1904 — Concluded.**

INDUSTRIES.	Number of Establishments Considered	EXCESS OF GREATEST OVER SMALLEST NUMBER OF PERSONS EMPLOYED		INCREASE (+) OR DECREASE (—) IN 1904	
		1903	1904	Number	Percentages
Food preparations, . . . . .	333	3,980	4,248	+268	+6.73
Furniture, . . . . .	138	1,790	1,615	—175	—9.78
Glass, . . . . .	13	100	120	+20	+20.00
Glue, isinglass, and starch, . . .	16	186	165	—21	—11.29
Hair work (animal and human), .	4	16	13	—3	—18.75
Hose and belting: rubber, linen, etc.,	7	12	34	+22	+183.33
Hosiery and knit goods, . . . .	38	1,341	1,289	—52	—3.88
Ink, mucilage, and paste, . . .	8	32	34	+2	+6.25
Ivory, bone, shell, and horn goods, etc., . . . . .	31	643	784	+141	+21.93
Jewelry, . . . . .	105	2,122	2,069	—53	—2.50
Leather, . . . . .	105	2,287	2,519	+232	+10.14
Leather goods, . . . . .	31	358	306	—52	—14.53
Liquors (bottled) and carbonated beverages), . . . . .	25	155	155	*=	*=
Liquors (malt), . . . . .	39	192	216	+24	+12.50
Liquors (distilled), . . . . .	6	8	8	*=	*=
Lumber, . . . . .	21	355	403	+48	+13.52
Machines and machinery, . . .	375	9,039	9,622	+583	+6.45
Metals and metallic goods, . . .	393	6,301	6,604	+303	+4.81
Models, lasts, and patterns, . .	44	224	288	+64	+28.57
Musical instruments and materials,	51	1,016	837	—179	—17.62
Oils and illuminating fluids, . .	11	47	40	—7	—14.89
Paints, colors, and crude chemicals,	27	34	56	+22	+64.71
Paper, . . . . .	81	3,910	1,821	—2,089	—53.43
Paper goods, . . . . .	43	978	921	—57	—5.83
Photographs and photographic materials, . . . . .	13	43	56	+13	+30.23
Polishes and dressing, . . . . .	42	141	106	—35	—24.82
Printing, publishing, and bookbinding, . . . . .	63	1,012	787	—225	—22.23
Print works, dye works, and bleacheries, . . . . .	46	1,289	1,720	+431	+33.44
Railroad construction and equipment, . . . . .	19	465	1,097	+632	+135.91
Rubber and elastic goods, . . .	46	1,997	2,572	+575	+28.79
Saddlery and harness, . . . . .	20	111	143	+32	+28.83
Scientific instruments and appliances, . . . . .	18	491	357	—134	—27.29
Shipbuilding, . . . . .	40	718	670	—48	—6.69
Silk and silk goods, . . . . .	13	454	430	—24	—5.29
Sporting and athletic goods, . .	13	363	425	+62	+17.08
Stone, . . . . .	185	2,928	3,295	+367	+12.53
Quarried, . . . . .	46	1,726	2,049	+323	+18.71
Cut and monumental, . . . .	139	1,202	1,246	+44	+3.66
Straw and palm leaf goods, . . .	18	3,592	3,536	—56	—1.56
Tallow, candles, soap, and grease, .	48	287	274	—13	—4.53
Tobacco, snuff, and cigars, . . .	84	954	1,010	+56	+5.87
Toys and games (children's), . .	10	498	493	—5	—1.00
Trunks and valises, . . . . .	8	76	105	+29	+38.16
Whips, lashes, and stocks, . . .	16	146	104	—42	—28.77
Wooden goods, . . . . .	74	437	466	+29	+6.64
Woolen goods, . . . . .	160	6,770	6,392	—378	—5.58
Woven goods and yarn, . . .	132	6,316	6,027	—289	—4.58
Shoddy, waste, etc., . . . .	28	454	365	—89	—19.60
Worsted goods, . . . . .	43	4,629	5,611	+982	+21.21
ALL INDUSTRIES, . . . . .	4,730	123,292	128,429	+5,137	+4.17

\* No change.



## PERSONS EMPLOYED — BOTH SEXES. AGGREGATES, BY MONTHS.

**1903, 1904.**

[This presentation shows, for the nine leading industries and for All Industries, the aggregate number of persons employed during each month of the years 1903 and 1904, together with percentages of employment and unemployment based on the month when the greatest number of persons was employed. This greatest number has been considered as 100 per cent, and the variations from this percentage month by month indicate the fluctuations in employment. It should be borne in mind that the persons here enumerated are wage earners only; officers, clerks, or other salaried persons are not included. Considerations of space have led to the curtailment of the presentation to the nine leading industries, but the figures in detail for any of the 79 classified industries may be obtained upon application to this Department.]

INDUSTRIES AND MONTHS.	1903			1904		
	Number of Persons Employed in Estab- lishments Con- sidered	PERCENTAGES OF —		Number of Persons Employed in Estab- lishments Con- sidered	PERCENTAGES OF —	
		Em- ployment	Unem- ployment		Em- ployment	Unem- ployment
<i>Boots and Shoes.</i>						
January, . . . . .	65,797	96.05	3.95	67,294	97.22	2.78
February, . . . . .	65,796	96.05	3.95	68,348	98.75	1.25
March, . . . . .	66,471	97.04	2.96	69,215	100.00	—
April, . . . . .	65,964	96.30	3.70	67,399	97.38	2.62
May, . . . . .	65,099	95.03	4.97	64,705	93.48	6.52
June, . . . . .	64,802	94.60	5.40	63,887	92.30	7.70
July, . . . . .	65,389	95.46	4.54	64,494	93.18	6.82
August, . . . . .	67,547	98.61	1.39	66,333	95.84	4.16
September, . . . . .	68,302	99.71	0.29	66,816	96.53	3.47
October, . . . . .	68,383	99.83	0.17	66,911	96.67	3.33
November, . . . . .	68,501	100.00	—	67,081	96.92	3.08
December, . . . . .	68,410	99.87	0.13	66,994	96.79	3.21
<i>Carpetings.</i>						
January, . . . . .	5,064	98.60	1.40	4,938	99.82	0.18
February, . . . . .	5,084	98.99	1.01	4,947	100.00	—
March, . . . . .	5,085	99.01	0.99	4,810	97.23	2.77
April, . . . . .	5,119	99.67	0.33	4,919	99.43	0.57
May, . . . . .	5,107	99.44	0.56	4,789	96.51	3.49
June, . . . . .	5,113	99.55	0.45	4,825	97.53	2.47
July, . . . . .	5,136	100.00	—	4,633	93.65	6.35
August, . . . . .	5,039	98.11	1.89	4,677	94.54	5.46
September, . . . . .	5,118	99.65	0.35	4,759	96.20	3.80
October, . . . . .	4,742	92.33	7.67	4,676	94.52	5.48
November, . . . . .	5,060	98.52	1.48	4,555	92.08	7.92
December, . . . . .	5,037	98.07	1.93	4,716	95.33	4.67
<i>Cotton Goods.</i>						
January, . . . . .	97,952	99.47	0.53	95,554	99.96	0.04
February, . . . . .	98,472	100.00	—	95,591	100.00	—
March, . . . . .	97,697	99.21	0.79	95,200	99.59	0.41
April, . . . . .	86,529	87.87	12.13	94,479	98.84	1.16
May, . . . . .	85,993	87.33	12.67	93,148	97.44	2.56
June, . . . . .	94,429	95.89	4.11	90,774	94.06	5.04
July, . . . . .	94,053	95.51	4.49	87,799	91.85	8.15
August, . . . . .	92,740	94.18	5.82	73,502	76.89	23.11
September, . . . . .	92,649	94.09	5.91	73,313	76.69	23.31
October, . . . . .	96,817	98.32	1.68	82,728	86.54	13.46
November, . . . . .	96,903	98.41	1.59	86,348	90.33	9.67
December, . . . . .	96,807	98.31	1.69	89,237	93.35	6.65

PERSONS EMPLOYED—BOTH SEXES. AGGREGATES, BY MONTHS  
—1903, 1904—Continued.

INDUSTRIES AND MONTHS.	1903			1904		
	Number of Persons Employed in Estab- lishments Con- sidered	PERCENTAGES OF—		Number of Persons Employed in Estab- lishments Con- sidered	PERCENTAGES OF—	
		Em- ployment	Unem- ployment		Em- ployment	Unem- ployment
<i>Leather.</i>						
January, . . . . .	7,006	95.96	4.04	7,610	94.46	5.54
February, . . . . .	7,102	97.27	2.73	7,692	95.48	4.52
March, . . . . .	7,148	97.90	2.10	7,817	97.03	2.97
April, . . . . .	7,053	96.60	3.40	7,731	95.97	4.03
May, . . . . .	7,221	98.90	1.10	7,474	92.78	7.22
June, . . . . .	7,301	100.00	—	7,370	91.48	8.52
July, . . . . .	7,169	98.19	1.81	7,638	94.81	5.19
August, . . . . .	7,247	99.26	0.74	7,659	95.07	4.93
September, . . . . .	7,255	99.37	0.63	7,553	93.76	6.24
October, . . . . .	7,299	99.97	0.03	7,813	96.98	3.02
November, . . . . .	7,271	99.59	0.41	7,889	97.93	2.07
December, . . . . .	7,270	99.58	0.42	8,056	100.00	—
<i>Machines and Machinery.</i>						
January, . . . . .	33,328	100.00	—	29,563	96.32	3.68
February, . . . . .	32,865	98.61	1.39	29,216	95.19	4.81
March, . . . . .	32,913	98.75	1.25	28,803	93.85	6.15
April, . . . . .	32,640	97.94	2.06	28,766	93.72	6.23
May, . . . . .	32,708	98.14	1.86	28,269	92.11	7.89
June, . . . . .	32,928	98.80	1.20	29,209	95.17	4.83
July, . . . . .	32,837	98.53	1.47	29,311	95.50	4.50
August, . . . . .	32,381	97.16	2.84	29,246	95.29	4.71
September, . . . . .	32,360	97.10	2.90	30,294	98.70	1.30
October, . . . . .	31,803	95.42	4.58	30,340	98.85	1.15
November, . . . . .	31,501	94.52	5.48	30,180	98.33	1.67
December, . . . . .	31,548	94.66	5.34	30,692	100.00	—
<i>Metals and Metallic Goods.</i>						
January, . . . . .	23,451	95.68	4.32	21,315	95.47	4.53
February, . . . . .	23,577	96.20	3.80	21,561	96.57	3.43
March, . . . . .	24,107	98.36	1.64	21,823	97.75	2.25
April, . . . . .	24,305	99.17	0.83	21,898	98.08	1.92
May, . . . . .	24,476	99.87	0.13	21,709	97.24	2.76
June, . . . . .	24,509	100.00	—	20,996	94.04	5.96
July, . . . . .	24,262	98.99	1.01	19,911	89.18	10.82
August, . . . . .	24,072	98.22	1.78	20,254	90.72	9.28
September, . . . . .	24,321	99.23	0.77	20,923	93.72	6.28
October, . . . . .	24,166	98.60	1.40	21,703	97.21	2.79
November, . . . . .	23,767	96.97	3.03	22,132	99.13	0.87
December, . . . . .	23,048	94.04	5.96	22,326	100.00	—
<i>Paper.</i>						
January, . . . . .	11,272	96.85	3.15	11,547	98.43	1.57
February, . . . . .	11,403	97.97	2.03	11,525	98.24	1.76
March, . . . . .	11,454	98.41	1.59	11,623	99.08	0.92
April, . . . . .	11,497	98.78	1.22	11,553	98.48	1.52
May, . . . . .	11,443	98.32	1.68	11,569	98.62	1.38
June, . . . . .	10,277	88.30	11.70	11,544	98.41	1.59
July, . . . . .	8,769	75.34	24.66	11,261	95.99	4.01
August, . . . . .	9,501	81.63	18.37	11,234	95.76	4.24
September, . . . . .	11,215	96.36	3.64	11,515	98.16	1.84
October, . . . . .	11,494	98.75	1.25	11,731	100.00	—
November, . . . . .	11,560	99.32	0.68	11,663	99.42	0.58
December, . . . . .	11,639	100.00	—	11,612	98.99	1.01
<i>Woolen Goods.</i>						
January, . . . . .	26,616	97.58	2.42	25,849	97.10	2.90
February, . . . . .	26,281	96.36	3.64	25,705	96.56	3.44
March, . . . . .	27,041	99.14	0.86	26,085	97.98	2.02
April, . . . . .	27,083	99.30	0.70	26,301	98.79	1.21
May, . . . . .	27,068	99.24	0.76	26,176	98.32	1.68
June, . . . . .	27,036	99.12	0.88	26,319	98.86	1.14
July, . . . . .	27,275	100.00	—	25,783	96.85	3.15
August, . . . . .	25,839	94.74	5.26	26,074	97.94	2.06
September, . . . . .	27,080	99.29	0.71	26,430	99.28	0.72
October, . . . . .	27,091	99.33	0.67	26,622	100.00	—
November, . . . . .	25,976	95.24	4.76	26,452	99.36	0.64
December, . . . . .	25,328	92.86	7.14	26,029	97.77	2.23

PERSONS EMPLOYED—BOTH SEXES. AGGREGATES, BY MONTHS  
—1903, 1904—Concluded.

INDUSTRIES AND MONTHS.	1903			1904		
	Number of Persons Employed in Estab- lishments Con- sidered	PERCENTAGES OF—		Number of Persons Employed in Estab- lishments Con- sidered	PERCENTAGES OF—	
		Em- ployment	Unem- ployment		Em- ployment	Unem- ployment
<i>Worsted Goods.</i>						
January, . . . . .	19,395	96.22	3.78	18,330	91.38	8.62
February, . . . . .	19,702	97.75	2.25	18,333	91.40	8.60
March, . . . . .	20,156	100.00	—	18,510	92.28	7.72
April, . . . . .	20,042	99.43	0.57	17,977	89.63	10.37
May, . . . . .	18,701	92.78	7.22	17,545	87.47	12.53
June, . . . . .	17,982	89.21	10.79	16,763	83.57	16.43
July, . . . . .	17,753	88.08	11.92	17,008	84.79	15.21
August, . . . . .	17,840	88.51	11.49	17,351	86.50	13.50
September, . . . . .	18,566	92.11	7.89	18,253	91.00	9.00
October, . . . . .	18,810	93.32	6.68	19,286	96.15	3.85
November, . . . . .	18,713	92.84	7.16	20,058	100.00	—
December, . . . . .	18,962	94.08	5.92	19,682	98.13	1.87
<i>ALL INDUSTRIES.</i>						
January, . . . . .	445,103	98.32	1.68	439,196	99.05	0.95
February, . . . . .	446,530	98.63	1.37	439,677	99.16	0.84
March, . . . . .	450,856	99.59	0.41	443,390	100.00	—
April, . . . . .	440,325	97.26	2.74	441,087	99.48	0.52
May, . . . . .	438,883	96.94	3.06	434,729	98.05	1.95
June, . . . . .	444,232	98.12	1.88	429,115	96.78	3.22
July, . . . . .	440,114	97.22	2.78	422,895	95.38	4.62
August, . . . . .	438,820	96.93	3.07	411,430	92.79	7.21
September, . . . . .	446,542	98.64	1.36	419,444	94.60	5.40
October, . . . . .	452,721	100.00	—	434,844	98.07	1.93
November, . . . . .	450,061	99.41	0.59	438,770	98.96	1.04
December, . . . . .	447,026	98.74	1.26	440,686	99.39	0.61

## WAGES PAID: BY INDUSTRIES.

1903, 1904.

[In this presentation, the figures given under "Total Amount Paid in Wages During the Year" represent the returns made by the same establishments in each industry for the years 1903 and 1904. The relative increases or decreases in 1904 are given with equivalent percentages. It should be borne in mind that these figures represent the sums paid to wage earners only, and do not include the amounts paid to officers, clerks, or other salaried persons.]

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	TOTAL AMOUNT PAID IN WAGES DURING THE YEAR		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percent- ages
Agricultural implements, . . .	8	\$419,355	\$394,172	-\$25,183	-6.01
Arms and ammunition, . . .	13	1,806,456	1,908,598	+102,142	+5.65
Artisans' tools, . . .	74	2,222,029	1,933,709	-288,320	-12.98
Awings, sails, tents, etc., . . .	34	184,230	165,872	-18,358	-9.96
Bicycles, tricycles, etc., . . .	6	364,141	263,807	-100,334	-27.55
Boots and shoes, . . .	656	34,498,626	34,586,282	+87,656	+0.25
Boots and shoes (factory prod- uct), . . .	390	31,716,533	31,814,576	+98,043	+0.31
Soles, heels, and cut stock, . . .	200	2,090,285	2,038,129	-52,156	-2.50
Boot and shoe findings, . . .	44	446,555	465,872	+19,317	+4.33
Stitching, heeling, etc., . . .	22	245,253	267,705	+22,452	+9.15
Boxes, barrels, kegs, etc., . . .	122	1,832,979	1,838,347	+5,368	+0.29
Boxes (paper), . . .	71	1,033,738	1,019,970	-13,768	-1.33
Brick, tiles, and sewer pipe, . . .	63	646,565	587,872	-58,693	-9.08
Brooms, brushes, and mops, . . .	33	456,356	427,761	-28,595	-6.27
Building materials, . . .	46	743,606	682,149	-61,457	-8.26
Burial cases, caskets, coffins, etc.,	3	103,875	111,082	+7,207	+6.94
Buttons and dress trimmings, . . .	9	126,908	113,037	-13,871	-10.93
Carpetings, . . .	10	2,238,164	2,021,859	-216,305	-9.66
Carriages and wagons, . . .	107	1,436,050	1,577,724	+141,674	+9.87
Cement, kaolin, lime, and plaster,	13	96,213	120,143	+23,930	+24.87
Chemical preparations (com- pounded), . . .	12	364,311	357,225	-7,086	-1.95
Clocks and watches, . . .	11	2,316,794	2,329,427	+12,633	+0.55
Clothing, . . .	155	4,564,484	4,637,444	+72,960	+1.60
Cooking, lighting, and heating apparatus, . . .	39	1,394,614	1,357,136	-37,478	-2.69
Cordage and twine, . . .	24	987,595	1,012,755	+25,160	+2.55
Cotton goods, . . .	166	37,105,519	32,267,548	-4,837,971	-13.04
Cotton goods (woven), . . .	124	32,909,225	28,398,802	-4,510,423	-13.71
Cotton yarn and thread, . . .	35	4,027,046	3,685,679	-341,367	-8.48
Cotton waste, . . .	7	169,248	183,067	+13,819	+8.16
Crayons, pencils, crucibles, etc., .	5	35,988	25,354	-10,634	-29.55
Drugs and medicines, . . .	30	403,248	402,639	-609	-0.15
Dyestuffs, . . .	6	61,475	55,425	-6,050	-9.84
Earthen, plaster, and stone ware, Electrical apparatus and appli- ances, . . .	11	122,579	116,310	-6,269	-5.11
Electroplating, . . .	24	4,161,013	4,515,016	+354,003	+8.51
Electroplating, . . .	10	81,540	86,146	+4,606	+5.65
Emery and sand paper and cloth, etc., . . .	8	256,998	243,522	-13,476	-5.24
Fancy articles, etc., . . .	16	287,138	263,305	-23,833	-8.30
Fertilizers, . . .	6	153,538	182,990	+29,452	+19.18
Fine arts and taxidermy, . . .	3	15,672	13,755	-1,917	-12.23
Fireworks and matches, . . .	3	38,926	43,125	+4,199	+10.79
Flax, hemp, and jute goods, . . .	9	1,138,466	1,231,426	+92,960	+8.17
Food preparations, . . .	333	4,892,548	5,093,973	+201,425	+4.12
Furniture, . . .	138	3,595,808	3,359,991	-235,817	-6.56



## WAGES PAID: BY INDUSTRIES—1903, 1904—Concluded.

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	TOTAL AMOUNT PAID IN WAGES DURING THE YEAR		INCREASE (+) OR DECREASE (—) IN 1904	
		1903	1904	Amounts	Percent- ages
Glass, . . . . .	13	\$200,725	\$158,723	—\$42,002	—20.93
Glue, isinglass, and starch, . . .	16	125,523	124,264	—1,259	—1.00
Hair work (animal and human), .	4	34,450	27,460	—6,990	—20.29
Hose and belting: rubber, linen, etc., . . . . .	7	53,184	39,512	—13,672	—25.71
Hosiery and knit goods, . . . .	38	2,785,739	2,712,147	—73,592	—2.64
Ink, mucilage, and paste, . . .	8	52,155	60,282	+8,127	+15.58
Ivory, bone, shell, and horn goods, etc., . . . . .	31	807,862	929,262	+121,400	+15.03
Jewelry, . . . . .	105	2,947,522	2,751,011	—196,511	—6.67
Leather, . . . . .	105	3,597,466	3,842,277	+244,811	+6.81
Leather goods, . . . . .	31	767,670	703,999	—63,671	—8.29
Liquors (bottled) and carbonated beverages, . . . . .	25	110,389	136,321	+25,932	+23.49
Liquors (malt), . . . . .	39	1,234,547	1,325,428	+90,881	+7.36
Liquors (distilled), . . . . .	6	20,667	21,920	+1,253	+6.06
Lumber, . . . . .	21	408,516	361,968	—46,548	—11.39
Machines and machinery, . . .	375	18,721,781	17,139,626	—1,582,155	—8.45
Metals and metallic goods, . . .	393	13,257,588	11,704,292	—1,553,296	—11.72
Models, lasts, and patterns, . .	44	463,502	498,144	+34,642	+7.47
Musical instruments and ma- terials, . . . . .	51	2,431,741	2,307,430	—124,311	—5.11
Oils and illuminating fluids, . .	11	103,786	112,481	+8,695	+8.38
Paints, colors, and crude chemi- cals, . . . . .	27	145,906	147,024	+1,118	+0.77
Paper, . . . . .	81	5,104,929	5,450,723	+345,794	+6.77
Paper goods, . . . . .	43	1,758,818	1,781,933	+23,115	+1.31
Photographs and photographic materials, . . . . .	13	97,168	86,171	—10,997	—11.32
Polishes and dressing, . . . . .	42	176,942	198,846	+21,904	+12.38
Printing, publishing, and book- binding, . . . . .	63	2,916,000	2,916,334	+334	+0.01
Print works, dye works, and bleacheries, . . . . .	46	3,405,268	3,159,178	—246,090	—7.23
Railroad construction and equip- ment, . . . . .	19	2,109,613	2,674,741	+565,128	+26.79
Rubber and elastic goods, . . .	46	5,652,490	5,951,200	+298,710	+5.28
Saddlery and harness, . . . . .	20	236,968	211,275	—25,693	—10.84
Scientific instruments and appli- ances, . . . . .	18	1,079,609	901,770	—177,839	—16.47
Shipbuilding, . . . . .	40	667,095	586,602	—80,493	—12.07
Silk and silk goods, . . . . .	13	1,227,731	1,089,391	—138,340	—11.27
Sporting and athletic goods, . .	13	432,620	439,240	+6,620	+1.53
Stone, . . . . .	185	2,779,423	2,853,814	+74,391	+2.68
Quarried, . . . . .	46	1,251,742	1,327,425	+75,683	+6.05
Cut and monumental, . . . . .	139	1,527,681	1,526,389	—1,292	—0.06
Straw and palm leaf goods, . . .	18	1,419,427	1,503,325	+83,898	+5.91
Tallow, candles, soap, and grease,	48	483,076	473,324	—9,752	—2.02
Tobacco, snuff, and cigars, . . .	84	1,969,827	2,045,545	+75,718	+3.84
Toys and games (children's), . .	10	312,456	314,491	+2,035	+0.65
Trunks and valises, . . . . .	8	83,872	84,978	+1,106	+1.32
Whips, lashes, and stocks, . . .	16	372,698	363,817	—8,881	—2.38
Wooden goods, . . . . .	74	731,292	750,503	+19,211	+2.63
Woolen goods, . . . . .	160	11,264,047	11,003,103	—260,944	—2.32
Woven goods and yarn, . . . . .	132	10,873,997	10,625,393	—248,604	—2.29
Shoddy, waste, etc., . . . . .	28	390,050	377,710	—12,340	—3.16
Worsted goods, . . . . .	43	7,354,201	7,291,478	—62,723	—0.85
ALL INDUSTRIES, . . . . .	4,730	\$210,093,834	\$202,582,249	—\$7,511,585	—3.58

# AVERAGE YEARLY EARNINGS: BY INDUSTRIES.

## 1903, 1904.

[In this presentation, the figures for average yearly earnings have been obtained by dividing the total amount paid in wages, pages 340 and 341, by the average number of persons employed during the year, as derived from the table on pages 331 and 332. It should be borne in mind that these sums were paid to wage earners only, and do not include the amounts paid to officers, clerks, or other salaried persons.]

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	AVERAGE YEARLY EARNINGS		INCREASE (+) OR DECREASE (-) IN 1904	
		1903	1904	Amounts	Percent- ages
Agricultural implements, . . . . .	8	\$546.04	\$523.47	-\$22.57	-4.13
Arms and ammunition, . . . . .	13	578.44	586.00	+7.56	+1.31
Artisans' tools, . . . . .	74	570.34	551.70	-18.64	-3.27
Awnings, sails, tents, etc., . . . . .	34	590.48	543.84	-46.64	-7.90
Bicycles, tricycles, etc., . . . . .	6	588.27	577.26	-11.01	-1.87
Boots and shoes, . . . . .	656	516.47	518.60	+2.13	+0.41
Boots and shoes (factory product), . . . . .	390	527.98	531.08	+3.10	+0.59
Soles, heels, and cut stock, . . . . .	200	422.45	412.49	-9.96	-2.36
Boot and shoe findings, . . . . .	44	385.63	399.20	+13.57	+3.52
Stitching, heeling, etc., . . . . .	22	396.21	394.26	-1.95	-0.49
Boxes, barrels, kegs, etc., . . . . .	122	472.66	474.90	+2.24	+0.47
Boxes (paper), . . . . .	71	369.32	359.78	-9.54	-2.58
Brick, tiles, and sewer pipe, . . . . .	63	464.82	456.42	-8.40	-1.81
Brooms, brushes, and mops, . . . . .	33	314.95	313.61	-1.34	-0.43
Building materials, . . . . .	46	632.86	592.14	-40.72	-6.43
Burial cases, caskets, coffins, etc., . . . . .	3	564.54	620.57	+56.03	+9.92
Buttons and dress trimmings, . . . . .	9	346.74	326.70	-20.04	-5.78
Carpetings, . . . . .	10	442.15	423.51	-18.64	-4.22
Carriages and wagons, . . . . .	107	612.65	617.02	+4.37	+0.71
Cement, kaolin, lime, and plaster, . . . . .	13	483.48	500.60	+17.12	+3.54
Chemical preparations (compounded), . . . . .	12	634.69	627.81	-6.88	-1.08
Clocks and watches, . . . . .	11	545.90	550.95	+5.05	+0.93
Clothing, . . . . .	155	381.30	384.91	+3.61	+0.95
Cooking, lighting, and heating apparatus, . . . . .	39	650.47	625.12	-25.35	-3.90
Cordage and twine, . . . . .	24	345.31	322.43	-22.88	-6.63
Cotton goods, . . . . .	166	393.61	366.10	-27.51	-6.99
Cotton goods (woven), . . . . .	124	399.14	368.00	-31.14	-7.80
Cotton yarn and thread, . . . . .	35	353.13	350.48	-2.65	-0.75
Cotton waste, . . . . .	7	407.83	405.02	-2.81	-0.69
Crayons, pencils, crucibles, etc., . . . . .	5	371.01	415.64	+44.63	+12.03
Drugs and medicines, . . . . .	30	425.82	434.82	+9.00	+2.11
Dyestuffs, . . . . .	6	520.97	494.87	-26.10	-5.01
Earthen, plaster, and stone ware, . . . . .	11	523.84	561.88	+38.04	+7.26
Electrical apparatus and appliances, . . . . .	24	506.88	576.48	+69.60	+13.73
Electroplating, . . . . .	10	599.56	574.31	-25.25	-4.21
Emery and sand paper and cloth, etc., . . . . .	8	590.80	593.96	+3.16	+0.53
Fancy articles, etc., . . . . .	16	397.70	366.72	-30.98	-7.79
Fertilizers, . . . . .	6	575.05	518.39	-56.66	-9.85
Fine arts and taxidermy, . . . . .	3	559.71	625.23	+65.52	+11.71
Fireworks and matches, . . . . .	3	405.48	431.25	+25.77	+6.36
Flax, hemp, and jute goods, . . . . .	9	348.69	348.65	-0.04	-0.01

**AVERAGE YEARLY EARNINGS: BY INDUSTRIES—1903, 1904**  
— Concluded.

INDUSTRIES.	Number of Es- tablish- ments Con- sidered	AVERAGE YEARLY EARNINGS		INCREASE (+) OR DECREASE (—) IN 1904	
		1903	1904	Amounts	Percent- ages
Food preparations, . . . . .	333	\$437.11	\$436.09	—\$1.02	—0.23
Furniture, . . . . .	138	500.11	488.87	—11.24	—2.25
Glass, . . . . .	13	575.14	543.57	—31.57	—5.49
Glue, isinglass, and starch, . . . . .	16	498.11	487.31	—10.80	—2.17
Hair work (animal and human), . . . . .	4	395.98	386.76	—9.22	—2.33
Hose and belting: rubber, linen, etc., . . . . .	7	474.86	411.58	—63.28	—13.33
Hosiery and knit goods, . . . . .	38	351.91	348.38	—3.53	—1.00
Ink, mucilage, and paste, . . . . .	8	453.52	430.59	—22.93	—5.06
Ivory, bone, shell, and horn goods, etc., . . . . .	31	440.73	430.01	—10.72	—2.43
Jewelry, . . . . .	105	514.94	505.61	—9.33	—1.81
Leather, . . . . .	105	499.65	499.32	—0.33	—0.07
Leather goods, . . . . .	31	471.54	446.98	—24.56	—5.21
Liquors (bottled) and carbonated beverages, . . . . .	25	554.72	595.29	+40.57	+7.31
Liquors (malt), . . . . .	39	859.11	875.45	+16.34	+1.90
Liquors (distilled), . . . . .	6	738.11	707.10	—31.01	—4.20
Lumber, . . . . .	21	519.08	531.52	+12.44	+2.40
Machines and machinery, . . . . .	375	576.21	580.61	+4.40	+0.76
Metals and metallic goods, . . . . .	393	551.85	546.65	—5.20	—0.94
Models, lasts, and patterns, . . . . .	44	725.36	747.96	+22.60	+3.12
Musical instruments and materials, . . . . .	51	591.52	591.65	+0.13	+0.02
Oils and illuminating fluids, . . . . .	11	540.55	618.03	+77.48	+14.33
Paints, colors, and crude chemicals, . . . . .	27	565.53	572.08	+6.55	+1.16
Paper, . . . . .	81	465.61	472.25	+6.64	+1.43
Paper goods, . . . . .	43	416.58	419.97	+3.39	+0.81
Photographs and photographic materials, . . . . .	13	585.35	559.55	—25.80	—4.41
Polishes and dressing, . . . . .	42	459.59	504.69	+45.10	+9.81
Printing, publishing, and bookbinding, . . . . .	63	567.32	567.49	+0.17	+0.03
Print works, dye works, and bleacheries, . . . . .	46	435.57	431.40	—4.17	—0.96
Railroad construction and equipment, . . . . .	19	610.77	609.56	—1.21	—0.20
Rubber and elastic goods, . . . . .	46	447.04	469.96	+22.92	+5.13
Saddlery and harness, . . . . .	20	525.43	503.04	—22.39	—4.26
Scientific instruments and appliances, . . . . .	18	464.15	433.75	—30.40	—6.55
Shipbuilding, . . . . .	40	679.32	687.69	+8.37	+1.23
Silk and silk goods, . . . . .	13	392.87	361.80	—31.07	—7.91
Sporting and athletic goods, . . . . .	13	457.32	449.58	—7.74	—1.69
Stone, . . . . .	185	582.44	600.68	+18.24	+3.13
Quarried, . . . . .	46	520.04	540.92	+20.88	+4.02
Cut and monumental, . . . . .	139	645.95	664.51	+18.56	+2.87
Straw and palm leaf goods, . . . . .	18	478.73	484.94	+6.21	+1.30
Tallow, candles, soap, and grease, . . . . .	48	509.04	507.86	—1.18	—0.23
Tobacco, snuff, and cigars, . . . . .	84	660.79	660.28	—0.51	—0.08
Toys and games (children's), . . . . .	10	399.56	385.88	—13.68	—3.42
Trunks and valises, . . . . .	8	458.32	452.01	—6.31	—1.38
Whips, lashes, and stocks, . . . . .	16	484.65	459.36	—25.29	—5.22
Wooden goods, . . . . .	74	474.56	512.64	+38.08	+8.02
Woolen goods, . . . . .	160	422.52	420.32	—2.20	—0.52
Woven goods and yarn, . . . . .	132	422.18	419.63	—2.55	—0.60
Shoddy, waste, etc., . . . . .	28	432.43	440.74	+8.31	+1.92
Worsted goods, . . . . .	43	391.08	399.27	+8.19	+2.09
ALL INDUSTRIES, . . . . .	4,730	\$471.52	\$467.44	— \$4.08	—0.87

# CLASSIFIED WEEKLY WAGES: BY SELECTED INDUSTRIES.

## 1903, 1904.

[In this presentation is shown for the nine leading industries and for All Industries for 1903 and 1904, a classification by sex of the weekly wages, ranging from under \$5 per week to \$20 and over. The returns were made by manufacturers to cover the week during which the largest number of persons was employed. It should be borne in mind that these figures represent wage earners only; officers, clerks, or other salaried persons are not included. Considerations of space have led to the curtailment of this presentation to the nine leading industries, but the figures in detail for 1903 and 1904 for any industry desired may be obtained upon application to this Department.]

INDUSTRIES AND CLASSIFICATION OF WEEKLY WAGES.	1903				1904			
	ADULTS (21 YEARS OF AGE AND OVER)		Young Persons (under 21 Years of Age)	Both Sexes	PERSONS 16 YEARS OF AGE AND OVER		Children (under 16 Years of Age)	Both Sexes
	Males	Females			Males	Females		
<i>Boots and Shoes.</i>	47,028	20,795	7,737	75,560	50,997	24,720	1,567	77,284
Under \$5, . . . . .	1,331	2,128	3,019	6,478	2,479	3,553	1,191	7,223
\$5 but under \$6, . . . . .	1,066	1,787	1,642	4,495	1,715	2,551	197	4,463
\$6 but under \$7, . . . . .	1,851	2,515	1,295	5,661	2,573	3,000	122	5,700
\$7 but under \$8, . . . . .	2,436	2,502	807	5,745	2,979	3,169	50	6,198
\$8 but under \$9, . . . . .	2,921	2,554	377	5,852	3,317	2,663	5	5,985
\$9 but under \$10, . . . . .	4,522	2,862	241	7,625	4,707	2,888	1	7,596
\$10 but under \$12, . . . . .	7,315	3,048	190	10,553	7,470	3,364	1	10,835
\$12 but under \$15, . . . . .	10,583	2,376	135	13,094	10,807	2,512	-	13,319
\$15 but under \$20, . . . . .	10,596	950	30	11,576	10,405	938	-	11,343
\$20 and over, . . . . .	4,407	73	1	4,481	4,540	82	-	4,622
<i>Carpetings.</i>	2,152	2,061	981	5,194	2,324	2,308	425	5,057
Under \$5, . . . . .	99	215	432	746	184	370	365	919
\$5 but under \$6, . . . . .	69	310	234	613	137	358	55	550
\$6 but under \$7, . . . . .	131	249	114	494	235	372	2	609
\$7 but under \$8, . . . . .	220	266	64	550	242	228	1	471
\$8 but under \$9, . . . . .	347	215	32	594	313	343	1	657
\$9 but under \$10, . . . . .	256	401	76	733	267	234	1	502
\$10 but under \$12, . . . . .	291	354	15	660	331	327	-	658
\$12 but under \$15, . . . . .	364	48	8	420	322	76	-	398
\$15 but under \$20, . . . . .	293	3	3	299	239	-	-	239
\$20 and over, . . . . .	82	-	3	85	54	-	-	54
<i>Cotton Goods.</i>	44,551	35,770	20,336	100,657	48,566	44,400	6,209	99,175
Under \$5, . . . . .	2,273	4,006	8,484	14,763	3,729	6,932	4,786	15,447
\$5 but under \$6, . . . . .	2,966	4,689	5,296	12,951	4,541	7,833	875	13,249
\$6 but under \$7, . . . . .	6,155	7,476	3,462	17,093	7,609	9,693	371	17,673
\$7 but under \$8, . . . . .	6,830	6,683	1,676	15,194	8,002	7,816	104	15,922
\$8 but under \$9, . . . . .	5,555	5,708	875	12,138	6,097	5,983	58	12,138
\$9 but under \$10, . . . . .	6,018	4,099	337	10,454	5,455	3,874	11	9,340
\$10 but under \$12, . . . . .	6,691	2,667	184	9,542	6,419	2,085	4	8,508
\$12 but under \$15, . . . . .	5,132	423	22	5,577	4,578	178	-	4,756
\$15 but under \$20, . . . . .	2,020	14	-	2,034	1,578	6	-	1,584
\$20 and over, . . . . .	911	-	-	911	558	-	-	558



CLASSIFIED WEEKLY WAGES: BY SELECTED INDUSTRIES  
— 1903, 1904 — Continued.

INDUSTRIES AND CLASSIFICATION OF WEEKLY WAGES.	1903				1904			
	ADULTS (21 YEARS OF AGE AND OVER)		Young Persons (under 21 Years of Age)	Both Sexes	PERSONS 16 YEARS OF AGE AND OVER		Children (under 16 Years of Age)	Both Sexes
	Males	Females			Males	Females		
<i>Leather.</i>	7,843	69	393	8,305	8,974	62	19	9,055
Under \$5, . . . . .	197	5	76	278	459	13	16	488
\$5 but under \$6, . . . .	186	11	47	244	421	8	2	431
\$6 but under \$7, . . . .	294	26	120	440	645	16	-	661
\$7 but under \$8, . . . .	661	21	74	756	895	21	-	916
\$8 but under \$9, . . . .	856	3	56	915	1,054	2	1	1,057
\$9 but under \$10, . . . .	1,617	2	18	1,637	1,644	1	-	1,645
\$10 but under \$12, . . . .	2,118	-	-	2,118	1,908	-	-	1,908
\$12 but under \$15, . . . .	1,125	1	2	1,128	1,092	1	-	1,093
\$15 but under \$20, . . . .	633	-	-	633	662	-	-	662
\$20 and over, . . . . .	156	-	-	156	194	-	-	194
<i>Machines and Machinery.</i>	33,661	421	2,610	36,692	33,636	621	248	34,505
Under \$5, . . . . .	848	67	957	1,872	1,445	251	222	1,918
\$5 but under \$6, . . . .	727	81	445	1,253	1,060	115	20	1,195
\$6 but under \$7, . . . .	1,155	76	427	1,658	1,584	110	4	1,698
\$7 but under \$8, . . . .	2,037	68	294	2,399	2,089	68	2	2,159
\$8 but under \$9, . . . .	2,896	57	181	3,134	2,857	27	-	2,884
\$9 but under \$10, . . . .	4,509	35	151	4,695	4,481	24	-	4,505
\$10 but under \$12, . . . .	5,595	24	90	5,709	5,266	14	-	5,280
\$12 but under \$15, . . . .	7,526	11	47	7,584	6,695	10	-	6,705
\$15 but under \$20, . . . .	6,641	2	15	6,658	6,345	2	-	6,347
\$20 and over, . . . . .	1,727	-	3	1,730	1,814	-	-	1,814
<i>Metals and Metallic Goods.</i>	22,486	1,599	2,906	26,991	21,969	2,174	455	24,598
Under \$5, . . . . .	497	254	1,005	1,756	907	607	354	1,868
\$5 but under \$6, . . . .	327	292	564	1,183	687	425	64	1,176
\$6 but under \$7, . . . .	810	540	543	1,893	1,173	622	34	1,829
\$7 but under \$8, . . . .	1,279	201	361	1,841	1,745	222	1	1,968
\$8 but under \$9, . . . .	1,809	135	146	2,090	1,779	135	2	1,916
\$9 but under \$10, . . . .	3,078	88	106	3,272	2,582	62	-	2,644
\$10 but under \$12, . . . .	3,857	54	100	4,011	3,457	70	-	3,527
\$12 but under \$15, . . . .	4,512	27	63	4,602	4,138	21	-	4,159
\$15 but under \$20, . . . .	4,928	7	16	4,951	4,366	9	-	4,375
\$20 and over, . . . . .	1,389	1	2	1,392	1,135	1	-	1,136
<i>Paper.</i>	7,321	3,749	1,006	12,076	7,719	4,328	110	12,157
Under \$5, . . . . .	96	463	268	827	168	777	59	1,004
\$5 but under \$6, . . . .	50	555	151	756	94	676	13	783
\$6 but under \$7, . . . .	112	1,752	333	2,197	249	1,928	37	2,214
\$7 but under \$8, . . . .	457	538	96	1,091	369	565	1	935
\$8 but under \$9, . . . .	537	288	50	875	707	233	-	940
\$9 but under \$10, . . . .	2,323	104	90	2,517	2,088	101	-	2,189
\$10 but under \$12, . . . .	1,354	26	13	1,393	1,485	25	-	1,510
\$12 but under \$15, . . . .	1,180	14	4	1,198	1,252	15	-	1,267
\$15 but under \$20, . . . .	951	9	1	961	1,022	8	-	1,030
\$20 and over, . . . . .	261	-	-	261	285	-	-	285
<i>Woolen Goods.</i>	17,143	8,195	4,203	29,541	18,378	9,404	1,166	28,948
Under \$5, . . . . .	385	712	1,556	2,653	858	1,389	638	2,935
\$5 but under \$6, . . . .	482	914	1,239	2,635	804	1,336	294	2,434
\$6 but under \$7, . . . .	1,571	1,678	802	4,051	1,754	1,848	140	3,742
\$7 but under \$8, . . . .	3,382	1,595	405	5,382	3,220	1,402	29	4,651
\$8 but under \$9, . . . .	2,222	1,168	117	3,507	3,019	1,278	10	4,307
\$9 but under \$10, . . . .	2,622	870	48	3,540	2,431	992	5	3,428
\$10 but under \$12, . . . .	2,705	822	28	3,555	2,684	780	-	3,464
\$12 but under \$15, . . . .	2,474	373	8	2,860	2,477	350	-	2,827
\$15 but under \$20, . . . .	929	58	-	987	867	29	-	896
\$20 and over, . . . . .	371	-	-	371	264	-	-	264

CLASSIFIED WEEKLY WAGES: BY SELECTED INDUSTRIES  
— 1903, 1904 — Concluded.

INDUSTRIES AND CLASSIFICATION OF WEEKLY WAGES.	1903				1904			
	ADULTS (21 YEARS OF AGE AND OVER)		Young Persons (under 21 Years of Age)	Both Sexes	PERSONS 16 YEARS OF AGE AND OVER		Children (under 16 Years of Age)	Both Sexes
	Males	Females			Males	Females		
<i>Worsted Goods.</i>	9,305	6,369	5,408	21,082	10,414	9,215	1,510	21,139
Under \$5, . . . . .	183	366	1,936	2,485	788	1,597	1,195	3,580
\$5 but under \$6, . . . .	852	1,428	1,565	3,845	818	2,244	227	3,289
\$6 but under \$7, . . . .	680	1,808	1,173	3,861	695	2,269	65	3,029
\$7 but under \$8, . . . .	1,140	860	347	2,347	1,246	883	23	2,152
\$8 but under \$9, . . . .	1,288	647	236	2,171	1,163	623	-	1,786
\$9 but under \$10, . . . .	967	498	84	1,549	967	657	-	1,624
\$10 but under \$12, . . . .	1,400	558	49	2,007	1,822	676	-	2,498
\$12 but under \$15, . . . .	1,830	168	17	2,015	1,804	225	-	2,029
\$15 but under \$20, . . . .	607	36	1	644	936	41	-	977
\$20 and over, . . . . .	158	-	-	158	175	-	-	175
 ALL INDUSTRIES.	 303,198	 123,178	 71,966	 498,342	 325,415	 155,060	 16,130	 496,605
Under \$5, . . . . .	7,738	14,592	29,656	51,986	15,737	28,691	12,374	56,802
\$5 but under \$6, . . . .	8,582	16,383	17,062	42,027	14,231	24,699	2,367	41,297
\$6 but under \$7, . . . .	17,100	24,419	12,469	53,988	22,794	29,700	966	53,460
\$7 but under \$8, . . . .	25,975	20,088	6,276	52,339	29,316	22,860	283	52,459
\$8 but under \$9, . . . .	27,634	16,568	3,139	47,341	30,543	17,759	101	48,403
\$9 but under \$10, . . . .	41,734	13,820	1,772	57,326	39,616	13,776	30	53,422
\$10 but under \$12, . . . .	50,229	10,647	1,022	61,898	50,782	10,948	9	61,739
\$12 but under \$15, . . . .	58,703	4,978	467	64,148	57,374	5,019	-	62,393
\$15 but under \$20, . . . .	48,935	1,519	89	50,543	48,554	1,463	-	50,017
\$20 and over, . . . . .	16,568	164	14	16,746	16,468	146	-	16,613

*Analysis.*

The presentation on pages 331 and 332 relates to average number of persons employed for the years 1903 and 1904. From the final line of the table we find that in the 4,730 establishments represented, the average number of persons employed was 445,569 in 1903. In 1904, in the same establishments, the average number fell to 433,383, a decrease of 12,186 persons, or 2.73 per cent. This decline is due in great measure to the strike in the cotton mills of Fall River, the average number of employees in the cotton goods industry falling from 94,270 in 1903 to 88,138 in 1904, a decrease of 6,132, or 6.50 per cent. Aside from this, however, general decrease is found among the other leading industries, notably in Machines and Machinery and Metals and Metallic Goods. In the former industry, the decline was from 32,491 in 1903 to 29,520 in 1904, a loss of 2,971 persons, or 9.14 per cent. In Metals and Metallic Goods, the average number of employees in 1903 was 24,024 as against 21,411 in 1904, a decline of 2,613, or 10.88 per cent. In Boots and Shoes a decrease of 0.16 per cent is shown; in Carpetings, a decrease of 5.69 per cent; in Woolen Goods, 1.80 per cent; and in Worsted Goods, 2.89 per cent. Only two of the nine leading industries show increase in average number of persons employed; they are, Leather, in which the number rose from 7,200 in 1903 to 7,695 in 1904, a gain of 495 persons, or 6.88 per cent, and Paper, the average being 10,964 in 1903 as against 11,542 in 1904, an increase of 578, or 5.27 per cent.

On pages 333 and 334, in connection with the average number of persons employed, we bring together the data for smallest and greatest number of persons employed. The final line of the table shows that at the periods of employment of the smallest number in 1903, the aggregate number of employees was 376,921. At the corresponding periods for 1904, the number of persons employed was 367,685, a decrease of 9,236, or 2.45 per cent. All of the leading industries show decrease in the smallest number of persons employed, except Leather and Paper, the percentages of decrease ranging from 1.49 in Woolen Goods to 13.47 in Metals and Metallic Goods.

The number of persons employed at periods of employment of greatest number in 1903 was 500,213; in 1904, at the corresponding periods, the aggregate reached 496,114, a decrease of 4,099 persons, or 0.82 per cent. As regards the greatest number of persons employed, only three of the nine leading industries show increase as compared with 1903; they are, Boots and Shoes, the greatest number being 76,547 in 1903 and 77,863 in 1904, a gain of 1,316, or 1.72 per cent; Leather, in which the greatest number in 1903 was 8,304, and in 1904, 8,975, a gain of 671, or 8.08 per cent; and Paper, the greatest number in 1903 being 12,159 as against 12,301 in 1904, a gain of 142, or 1.17 per cent. In six of the nine leading industries decreases are shown, the percentages of decrease ranging from 0.51 in Worsted Goods to 9.19 per cent in Metals and Metallic Goods.

The presentation on pages 335 and 336 exhibits the condition of employment and unemployment as brought out by the range, or difference between the smallest and greatest number of persons employed. The following table, drawn therefrom, is brought forward for the nine leading industries, for other industries, and for All Industries:

INDUSTRIES.	EXCESS OF GREATEST OVER SMALLEST NUMBER OF PERSONS EMPLOYED		INCREASE (+) OR DECREASE (-) IN 1904	
	1903	1904	Number	Percent- ages
Boots and shoes (aggregate), . . .	20,965	23,151	+2,186	+10.43
Factory product, . . . . .	18,725	20,604	+1,879	+10.03
Soles, heels, and cut stock, . . .	1,583	1,882	+299	+18.89
Findings, . . . . .	390	406	+16	+4.10
Stitching, heeling, etc., . . . .	267	259	-8	-3.00
Carpetings, . . . . .	512	835	+323	+63.09
Cotton goods (aggregate), . . . .	21,232	21,468	+236	+1.11
Woven goods, . . . . .	19,009	19,349	+340	+1.79
Yarn and thread, . . . . .	2,163	2,039	-124	-5.73
Waste, . . . . .	60	80	+20	+33.33
Leather, . . . . .	2,287	2,519	+232	+10.14
Machines and machinery, . . . .	9,039	9,622	+583	+6.45
Metals and metallic goods, . . . .	6,301	6,604	+303	+4.81
Paper, . . . . .	3,910	1,821	-2,089	-53.43
Woolen goods (aggregate), . . . .	6,770	6,392	-378	-5.58
Woven goods and yarn, . . . . .	6,316	6,027	-289	-4.58
Shoddy, waste, etc., . . . . .	454	365	-89	-19.60
Worsted goods, . . . . .	4,629	5,611	+982	+21.21
Nine industries, . . . . .	75,645	78,023	+2,378	+3.14
Other industries, . . . . .	47,647	50,406	+2,759	+5.79
All industries, . . . . .	123,292	128,429	+5,137	+4.17

From the final line of the table it is at once apparent that there were more persons out of employment in 1904 than in



1903, the range being 123,292 in 1903 and 128,429 in 1904, a difference of 5,137 persons, or 4.17 per cent. Understanding that plus signs in the table indicate a greater degree of unemployment, it will be seen that only two industries exhibit better conditions in 1904 than in 1903, namely, Paper and Woolen Goods. In the paper industry in 1903 the range, or difference between the smallest and greatest number of persons employed, was 3,910; that is to say, 3,910 persons were out of employment for a period of longer or shorter duration, while in 1904 only 1,821 persons were so unemployed. The range in Woolen Goods was 6,770 in 1903 and 6,392 in 1904, the degree of unemployment being 5.58 per cent less in the latter year.

In the aggregate, the range for the nine leading industries was 75,645 in 1903 and 78,023 in 1904. In other words, there were 2,378 more persons out of employment for a longer or shorter period in 1904 than in 1903. For other industries in the aggregate, a greater degree of unemployment appears in 1904 than in 1903, the difference in range being 2,759 persons, or 5.79 per cent.

This range of unemployment is perhaps more forcibly brought out by the following table of percentages, which exhibits the conditions year by year since 1895, as taken from the annual reports:

COMPARATIVE YEARS.	Number of Establishments Considered	PERCENTAGES		
		Persons Employed at Periods of Employment of Smallest Number of Persons Employed at Periods of Employment of Greatest Number	Range (Unemployed at Some Time During the Year)	Persons Employed at Periods of Employment of Greatest Number
1895, . . . . .	4,609	73.53	26.47	100.00
1896, . . . . .	4,609	66.52	33.48	100.00
1896, . . . . .	4,695	67.32	32.68	100.00
1897, . . . . .	4,695	71.74	28.26	100.00
1897, . . . . .	4,701	72.13	27.87	100.00
1898, . . . . .	4,701	70.36	29.64	100.00
1898, . . . . .	4,740	70.21	29.79	100.00
1899, . . . . .	4,740	74.19	25.81	100.00
1899, . . . . .	4,645	74.17	25.83	100.00
1900, . . . . .	4,645	73.08	26.92	100.00
1900, . . . . .	4,696	73.17	26.83	100.00
1901, . . . . .	4,696	74.41	25.59	100.00
1901, . . . . .	4,658	74.76	25.24	100.00
1902, . . . . .	4,658	77.51	22.49	100.00
1902, . . . . .	4,673	77.24	22.76	100.00
1903, . . . . .	4,673	75.46	24.54	100.00
1903, . . . . .	4,730	75.35	24.65	100.00
1904, . . . . .	4,730	74.11	25.89	100.00

It will be understood that if no persons were out of employment at any time during the year, in the establishments making return in the different industries, the percentage of persons employed during the year would stand at 100; but inasmuch as at the periods of employment of smallest number, less persons are employed than at the periods of employment of greatest number, the difference between the number employed at these two periods may be represented by a percentage which indicates the number of persons unemployed at some time during the year, the duration of unemployment not being determined. This percentage of unemployment is shown in the third column of the table. The principal point brought out by the above figures is that about one-quarter of the persons employed at the periods of greatest number are out of employment at some time during the year. It will be seen that in two years only, namely, 1902 and 1903, did the percentage of unemployment fall below 25, while in a single instance, 1896 as compared with 1895, the percentage of unemployment reached 33.48.

The percentage of unemployment for 1903, in the comparison for 1903, 1904, as shown by the last two lines of the table, was 24.65, while the percentage of unemployment for 1904 rose to 25.89.

It will be further understood that these figures are on the basis of establishments. It is, of course, possible that a person out of employment in one establishment may find employment in another, so that it does not necessarily follow that these persons were absolutely out of work.

For the purpose of exhibiting employment and unemployment on the basis of industries, the presentation on pages 337 to 339 is given. The following table, drawn therefrom, presents the facts for All Industries :

MONTHS.	NUMBER OF PERSONS EMPLOYED		PERCENTAGES OF EMPLOYMENT		PERCENTAGES OF UNEMPLOYMENT	
	1903	1904	1903	1904	1903	1904
January, . . . . .	445,103	439,196	98.32	99.05	1.68	0.95
February, . . . . .	446,530	439,677	98.63	99.16	1.37	0.84
March, . . . . .	450,856	443,390	99.59	100.00	0.41	-
April, . . . . .	440,325	441,087	97.26	99.48	2.74	0.52
May, . . . . .	438,883	434,729	96.94	98.05	3.06	1.95

MONTHS.	NUMBER OF PERSONS EMPLOYED		PERCENTAGES OF EMPLOYMENT		PERCENTAGES OF UNEMPLOYMENT	
	1903	1904	1903	1904	1903	1904
June, . . . . .	444,232	429,115	98.12	96.78	1.88	3.22
July, . . . . .	440,114	422,895	97.22	95.38	2.78	4.62
August, . . . . .	438,820	411,430	96.93	92.79	3.07	7.21
September, . . . . .	446,542	419,444	98.64	94.60	1.36	5.40
October, . . . . .	452,721	434,844	100.00	98.07	-	1.93
November, . . . . .	450,061	438,770	99.41	98.96	0.59	1.04
December, . . . . .	447,026	440,686	98.74	99.39	1.26	0.61

In the preceding table, the aggregate number of persons employed each month is given, together with percentages of employment and unemployment as based upon the highest month. In 1903, the month exhibiting the greatest employment is October, the aggregate for that month being 452,721. This is, therefore, considered 100 per cent, and the variations from this number month by month represent the amount of employment and unemployment. The smallest number of persons appears in the month of August, namely, 438,820, or 96.93 per cent of the number employed in October. Unemployment for this month is, therefore, represented by 3.07 per cent, found in the fifth column of the table. The only other month approaching this degree of unemployment is that of May, the number of persons reaching 438,883, or 96.94 per cent of the number employed in October; unemployment for May is, therefore, represented by 3.06 per cent. None of the other months of 1903 show any marked degree of unemployment, the percentages running as low as 0.41 in the month of March and, except in the two cases cited, not rising above 2.78 per cent, as shown in the month of July. The conditions for the year 1904 were somewhat different. The month exhibiting the largest number of persons was March, the aggregate reaching 443,390, considerably lower, it will be noted, than the highest month of 1903. This is, therefore, considered 100 per cent. A reference to the last column of the table will show material variation from this figure for the months of July, August, and September, the month exhibiting the greatest degree of unemployment being August, for which the aggregate number of persons appears as 411,430. This constitutes 92.79 per cent of the number employed in March, leaving unemployment for that month to be represented by the difference

between 92.79 and 100, or 7.21 per cent. This is closely followed by September, in which the percentage of unemployment fell to 5.40 as compared with March, and by July, showing a percentage of unemployment of 4.62. For the other months of the year the percentages of unemployment are inconsiderable, ranging from 0.52 in the month of April to 3.22 for that of June.

The presentation on pages 340 and 341 shows the total amount paid in wages during the year in the 4,730 establishments making returns for 1903 and 1904. For purposes of reference we reproduce the figures for the nine leading industries.

INDUSTRIES.	TOTAL AMOUNT PAID IN WAGES DURING THE YEAR		INCREASE (+) OR DECREASE (-) IN 1904	
	1903	1904	Amounts	Percentages
Boots and shoes, . . . . .	\$34,498,626	\$34,586,282	+\$87,656	+0.25
Carpetings, . . . . .	2,238,164	2,021,859	-216,305	-9.66
Cotton goods, . . . . .	37,105,519	32,267,548	-4,837,971	-13.04
Leather, . . . . .	3,597,466	3,842,277	+244,811	+6.81
Machines and machinery, . . . . .	18,721,781	17,139,626	-1,582,155	-8.45
Metals and metallic goods, . . . . .	13,257,588	11,704,292	-1,553,296	-11.72
Paper, . . . . .	5,104,929	5,450,723	+345,794	+6.77
Woolen goods, . . . . .	11,264,047	11,003,103	-260,944	-2.32
Worsted goods, . . . . .	7,354,201	7,291,478	-62,723	-0.85
Nine industries, . . . . .	133,142,321	125,307,188	-7,835,133	-5.88
Other industries, . . . . .	76,951,513	77,275,061	+323,548	+0.42
All industries, . . . . .	210,093,834	202,582,249	-7,511,585	-3.58

Here, as in the presentations for goods made and persons employed, the total expenditure for wages shows decline, the aggregate for 1903 being \$210,093,834 and for 1904 \$202,582,249, a decrease of \$7,511,585, or 3.58 per cent, in the latter year. Only three of the nine leading industries show greater amount paid in wages in 1904 than in 1903, namely, Boots and Shoes, the total for 1903 being \$34,498,626 as against \$34,586,282 in 1904, an increase of \$87,656, or 0.25 per cent; Leather, the amount rising from \$3,597,466 in 1903 to \$3,842,277 in 1904, an increase of \$244,811, or 6.81 per cent; and Paper, in which the total amount distributed in 1903 was \$5,104,929, as against \$5,450,723 in 1904, a gain of \$345,794, or 6.77 per cent. All of the other nine industries show decrease in amount paid out in wages, the greatest decline appearing in Cotton Goods. The mills, many of which suffered



from a shutdown of more than four months' duration, paid in wages during 1904 \$32,267,548 as against \$37,105,519 in 1903, a decrease of \$4,837,971, or 13.04 per cent. In Metals and Metallic Goods the decline was from \$13,257,588 in 1903 to \$11,704,292 in 1904, a decrease of \$1,553,296, or 11.72 per cent. The decrease in Machines and Machinery amounted to \$1,582,155, or 8.45 per cent, while in Carpetings, Woolen Goods, and Worsted Goods, percentages of decrease of 9.66, 2.32, and 0.85, respectively, appear. In the aggregate for the nine leading industries, the total amount expended for wages was \$133,142,321 in 1903 and \$125,307,188 in 1904, a decline of \$7,835,133, or 5.88 per cent.

For industries other than the nine, 70 in number, the aggregate amount paid in wages in 1903 was \$76,951,513 and in 1904 \$77,275,061, a slight increase, amounting to \$323,548, or 0.42 per cent, being shown in the latter year.

In the presentation on pages 342 and 343 average yearly earnings for the years 1903 and 1904 are given. As explained in the headnote to the table, these averages have been obtained by dividing the total amount paid in wages during the year, pages 340 and 341, by the average number of persons employed, pages 331 and 332. The following table brings forward the figures for the nine leading industries and for All Industries:

INDUSTRIES.	AVERAGE YEARLY EARNINGS		INCREASE (+) OR DECREASE (-) IN 1904	
	1903	1904	Amounts	Percentages
Boots and shoes (aggregate), . . .	\$516.47	\$518.60	+\$2.13	+0.41
Factory product, . . . . .	527.98	531.08	+3.10	+0.59
Soles, heels, and cut stock, . . .	422.45	412.49	-9.96	-2.36
Findings, . . . . .	385.63	399.20	+13.57	+3.52
Stitching, beeling, etc., . . . .	396.21	394.26	-1.95	-0.49
Carpetings, . . . . .	442.15	423.51	-18.64	-4.22
Cotton goods (aggregate), . . . .	393.61	366.10	-27.51	-6.99
Woven goods . . . . .	399.14	368.00	-31.14	-7.80
Yarn and thread, . . . . .	353.13	350.48	-2.65	-0.75
Waste, . . . . .	407.83	405.02	-2.81	-0.69
Leather, . . . . .	499.65	499.32	-0.33	-0.07
Machines and machinery, . . . .	576.21	580.61	+4.40	+0.76
Metals and metallic goods, . . . .	551.85	546.65	-5.20	-0.94
Paper, . . . . .	465.61	472.25	+6.64	+1.43
Woolen goods (aggregate), . . . .	422.52	420.32	-2.20	-0.52
Woven goods and yarn, . . . . .	422.18	419.63	-2.55	-0.60
Shoddy, waste, etc., . . . . .	432.43	440.74	+8.31	+1.92
Worsted goods, . . . . .	391.08	399.27	+8.19	+2.09
Nine industries, . . . . .	465.09	456.97	-8.12	-1.75
Other industries, . . . . .	483.07	485.48	+2.41	+0.50
All industries, . . . . .	471.52	467.44	-4.08	-0.87

The average yearly earnings for All Industries, without taking into consideration the elements of skill, sex, or age, for 1903, amounted to \$471.52 and in 1904 to \$467.44, a decrease in the latter year of \$4.08, or 0.87 per cent. Five of the nine leading industries as presented in the preceding table show decrease in the average yearly earnings in 1904 as compared with 1903; they are, Carpetings, in which the average earnings in 1903 were \$442.15 and in 1904 \$423.51, a decrease of \$18.64, or 4.22 per cent; Cotton Goods, in which the average earnings dropped from \$393.61 in 1903 to \$366.10 in 1904, a decline of \$27.51, or 6.99 per cent; Leather, in which a decrease of 0.07 per cent appears; Metals and Metallic Goods, showing a decrease of 0.94 per cent; and Woolen Goods, a decrease of 0.52 per cent. An increase is shown for Boots and Shoes, the average yearly earnings being \$516.47 for 1903 as against \$518.60 in 1904, a gain in the latter year of \$2.13, or 0.41 per cent. Increase appears also for Machines and Machinery, the average earnings being \$576.21 in 1903 and \$580.61 in 1904, a gain of \$4.40, or 0.76 per cent; for Paper, in which the average earnings were \$465.61 in 1903 and \$472.25 in 1904, an increase of \$6.64, or 1.43 per cent; and for Worsteds, the average yearly earnings being \$391.08 in 1903 as against \$399.27 in 1904, an increase in the latter year of \$8.19, or 2.09 per cent.

In the aggregate for the nine leading industries, the decreases noted above are reflected, the average yearly earnings for 1903 being \$465.09 as against \$456.97 in 1904, a decline of \$8.12, or 1.75 per cent, while for other industries, in the aggregate, increase appears, \$483.07 in 1903 as against \$485.48 in 1904, a gain of \$2.41, or 0.50 per cent. It will be understood that the decreases shown are generally due to fluctuation in employment brought about by the business depression which existed in 1904 rather than to any decrease in the *rates* of wages paid, as will readily appear from a consideration of the presentation for classified weekly wages given on pages 344 to 346 from which the following table, for All Industries, is taken, the numbers being reduced to percentages:

CLASSIFICATION.	PERCENTAGES					
	1903			1904		
	Males	Females	Young Persons (under 21 Years of Age)	Males	Females	Children (under 16 Years of Age)
Under \$5, . . . .	14.88	28.07	57.05	27.71	50.51	21.78
\$5 but under \$6, . . . .	20.42	38.98	40.60	34.46	59.81	5.73
\$6 but under \$7, . . . .	31.67	45.23	23.10	42.64	55.55	1.81
\$7 but under \$8, . . . .	49.63	38.38	11.99	55.88	43.58	0.54
\$8 but under \$9, . . . .	58.37	35.00	6.63	63.10	36.69	0.21
\$9 but under \$10, . . . .	72.80	24.11	3.09	74.16	25.79	0.05
\$10 but under \$12, . . . .	81.15	17.20	1.65	82.25	17.73	0.02
\$12 but under \$15, . . . .	91.51	7.76	0.73	91.96	8.04	-
\$15 but under \$20, . . . .	96.82	3.00	0.18	97.07	2.93	-
\$20 and over, . . . .	98.94	0.98	0.08	99.13	0.87	-

Marked increase may be noted in the columns devoted to males and females. The percentages do not admit of special comparison, since the age limit in 1903 for "young persons" was at 21 years of age, while that of the Census, of which the 1904 returns form a part, was at 16 years of age. These percentages are shown in the third and sixth columns of the table, respectively. It will be at once apparent that in 1904, "young persons" over 16 but under 21 find no place in the sixth column, but are thrown for that year either into the column for males or females. We have consequently an apparently higher percentage of males in each of the wage classes for 1904 than for 1903. But it is apparent only, and is easily explained by the difference in the age limit. The same is true of the classes for females, for which uniformly higher percentages in 1904 than in 1903 are shown. The classes least affected by this change are those receiving \$9 to \$10, \$10 to \$12, and \$12 to \$15, respectively. Of the persons receiving \$9 but under \$10, in 1903, 73 out of every 100 (72.80 per cent) are males, 24 (24.11 per cent) are females, and three in every 100 (3.09 per cent) are young persons. In 1904, in this wage class, 74 out of every 100 (74.16 per cent) are males, and 26 (25.79 per cent) are females, the proportion of young persons being less than one per cent. In the wage class \$10 but under \$12 in 1903, we find that out of every 100, 81 are males, 17 are females, and two are young persons. In 1904 they appear as 82 males and 18 females. In the class \$12 but under \$15, out of every 100 in 1903, we find that 92 are males and eight are females, while for 1904 the same proportions obtain, the difference in percentages being only fractional.

### Working Time and Proportion of Business Done.

Under this head are shown the average number of days in operation and the average proportion of business done.

The average number of days in operation is based upon the average number of persons employed, the number of days reported by each establishment being multiplied by the average number of persons employed therein, and the sum of these multiplications for all the establishments divided by the aggregate average number of persons, an average for each industry and for All Industries being thus obtained. The actual number of working days, exclusive of Sundays and holidays, was 306 in both 1903 and 1904.

The proportion of business done is based upon the greatest amount of goods which could be turned out in any establishment, presupposing a sufficient demand for such goods, without increasing existing facilities. This greatest amount is considered as 100 per cent. If an establishment produced goods equivalent to three-fourths of its greatest capacity, the proportion of business done would be represented by 75 per cent, while if only one-half of a possible output were reached it would be considered as 50 per cent. For example, in All Industries, the average proportion of business done for the year 1904 is represented by 68.39 per cent, over two-thirds of the possible 100 per cent which might have been done, had business conditions warranted, without enlarging the capacity of the manufacturing plants.

The several proportions returned by the establishments in each industry have been aggregated and the sum divided by the full number of establishments to obtain the average for each industry and for All Industries.



# DAYS IN OPERATION AND PROPORTION OF BUSINESS DONE: BY INDUSTRIES.

1903, 1904.

[The figures given in the first two columns of this presentation represent the Average Number of Days in Operation, while in the last two columns the Average Proportion of Business Done is shown. The average number of days in operation is based upon the average number of persons employed, the number of days per establishment being multiplied by the average number of persons employed therein, and the sum divided by the aggregate average number of persons, an average for each industry and for All Industries being thus obtained. As regards Average Proportion of Business Done, greatest capacity, or maximum production, has been considered as 100 per cent, and the percentages given indicate the average proportion of business done during each year on the basis stated.]

INDUSTRIES.	AVERAGE NUMBER OF DAYS IN OPERATION		AVERAGE PROPOR- TION OF BUSINESS DONE	
	1903	1904	1903	1904
Agricultural implements, . . . . .	302.50	296.42	70.75	72.13
Arms and ammunition, . . . . .	291.32	288.76	72.69	73.46
Artisans' tools, . . . . .	297.98	289.33	69.78	66.24
Awnings, sails, tents, etc., . . . . .	289.19	297.34	57.24	55.38
Bicycles, tricycles, etc., . . . . .	297.71	302.13	60.00	51.50
Boots and shoes, . . . . .	294.16	295.20	69.95	69.75
Boots and shoes (factory product), . . . . .	293.76	295.04	70.30	68.89
Soles, heels, and cut stock, . . . . .	298.19	295.93	70.85	71.84
Boot and shoe findings, . . . . .	295.49	296.38	65.27	70.00
Stitching, heelings, etc., . . . . .	298.64	302.42	64.86	65.50
Boxes, barrels, kegs, etc., . . . . .	296.80	297.08	75.61	74.73
Boxes (paper), . . . . .	297.13	295.51	72.76	73.49
Brick, tiles, and sewer pipe, . . . . .	213.22	182.64	64.52	61.10
Brooms, brushes, and mops, . . . . .	297.50	301.61	65.30	59.12
Building materials, . . . . .	295.06	301.68	65.63	62.76
Burial cases, caskets, coffins, etc., . . . . .	306.00	311.54	82.00	85.00
Buttons and dress trimmings, . . . . .	297.24	305.79	70.00	68.00
Carpetings, . . . . .	303.63	290.20	89.70	79.30
Carriages and wagons, . . . . .	293.64	295.18	65.59	60.56
Cement, kaolin, lime, and plaster, . . . . .	269.17	286.88	61.31	60.00
Chemical preparations (compounded), . . . . .	304.55	305.69	65.67	70.00
Clocks and watches, . . . . .	292.31	293.64	67.55	74.36
Clothing, . . . . .	293.05	298.25	70.80	71.01
Cooking, lighting, and heating apparatus, . . . . .	281.10	286.30	79.15	70.59
Cordage and twine, . . . . .	298.27	296.88	75.46	69.50
Cotton goods, . . . . .	290.51	279.66	88.26	79.62
Cotton goods (woven), . . . . .	288.90	277.47	89.25	79.60
Cotton yarn and thread, . . . . .	301.67	294.64	86.04	80.33
Cotton waste, . . . . .	305.71	304.56	79.29	77.14
Crayons, pencils, crucibles, etc., . . . . .	305.45	300.29	73.60	61.00
Drugs and medicines, . . . . .	294.94	298.11	56.40	53.23
Dyestuffs, . . . . .	271.29	251.50	70.33	59.50
Earthen, plaster, and stone ware, . . . . .	287.24	293.75	69.09	73.18
Electrical apparatus and appliances, . . . . .	302.26	301.51	76.83	67.75
Electroplating, . . . . .	297.56	298.73	67.50	75.50
Emery and sand paper and cloth, etc., . . . . .	303.67	301.03	73.13	61.50
Fancy articles, etc., . . . . .	300.22	299.22	75.06	73.13
Fertilizers, . . . . .	304.99	308.42	66.67	60.67
Fine arts and taxidermy, . . . . .	305.64	306.64	76.67	73.33

**DAYS IN OPERATION AND PROPORTION OF BUSINESS DONE:  
BY INDUSTRIES — 1903, 1904 — Concluded.**

INDUSTRIES.	AVERAGE NUMBER OF DAYS IN OPERATION		AVERAGE PROPOR- TION OF BUSINESS DONE	
	1903	1904	1903	1904
Fireworks and matches, . . . . .	291.66	295.32	83.33	80.00
Flax, hemp, and jute goods, . . . . .	301.18	301.46	92.22	87.44
Food preparations, . . . . .	293.37	290.88	63.00	65.23
Furniture, . . . . .	296.30	299.84	68.56	65.70
Glass, . . . . .	289.77	287.02	66.85	57.92
Glue, isinglass, and starch, . . . . .	270.54	281.86	76.56	73.00
Hair work (animal and human), . . . . .	211.18	249.18	57.50	43.00
Hose and belting rubber, linen, etc., . . . . .	285.08	299.50	62.57	74.29
Hosiery and knit goods, . . . . .	298.58	298.22	72.47	72.18
Ink, mucilage, and paste, . . . . .	295.10	303.55	55.25	61.75
Ivory, bone, shell, and horn goods, etc., . . . . .	292.30	291.82	73.39	72.39
Jewelry, . . . . .	287.39	283.89	67.17	64.12
Leather, . . . . .	298.46	300.39	69.67	72.96
Leather goods, . . . . .	302.56	303.69	68.06	68.23
Liquors (bottled) and carbonated beverages, . . . . .	294.41	293.77	49.60	53.48
Liquors (malt), . . . . .	304.09	305.07	63.50	59.21
Liquors (distilled), . . . . .	229.46	217.39	47.83	41.17
Lumber, . . . . .	272.91	291.63	73.80	68.05
Machines and machinery, . . . . .	298.24	300.59	70.63	65.31
Metals and metallic goods, . . . . .	297.04	303.38	69.54	67.06
Models, casts, and patterns, . . . . .	292.03	299.10	59.66	64.11
Musical instruments and materials, . . . . .	301.47	298.76	73.73	65.47
Oil and illuminating fluids, . . . . .	305.14	307.01	64.55	71.64
Paints, colors, and crude chemicals, . . . . .	295.85	295.27	71.44	64.74
Paper, . . . . .	284.88	294.12	87.04	88.17
Paper goods, . . . . .	299.59	300.48	79.71	71.57
Photographs and photographic materials, . . . . .	303.11	305.07	55.69	60.77
Polishes and dressing, . . . . .	301.65	302.99	54.67	62.05
Printing, publishing, and bookbinding, . . . . .	303.15	303.99	77.06	77.13
Print works, dye works, and bleacheries, . . . . .	301.46	293.72	73.87	69.59
Railroad construction and equipment, . . . . .	303.87	305.00	78.43	77.57
Rubber and elastic goods, . . . . .	200.58	295.67	76.46	71.15
Saddlery and harness, . . . . .	300.62	305.86	64.75	61.15
Scientific instruments and appliances, . . . . .	298.86	290.13	69.17	70.33
Shoemaking, . . . . .	292.33	293.12	55.18	49.83
Silk and silk goods, . . . . .	290.47	291.71	75.08	74.46
Sporting and athletic goods, . . . . .	293.25	302.31	72.31	68.08
Stone, . . . . .	280.05	278.79	61.64	62.36
Quarried, . . . . .	275.29	273.32	51.38	56.60
Cut and monumental, . . . . .	284.89	284.63	64.74	64.10
Straw and palm leaf goods, . . . . .	266.21	297.50	74.28	72.89
Tallow, candles, soap, and grease, . . . . .	303.44	301.99	67.79	68.25
Tobacco, snuff, and cigars, . . . . .	293.89	293.95	59.67	61.81
Toys and games (children's), . . . . .	293.19	293.22	68.40	67.60
Trunks and valises, . . . . .	274.97	292.22	71.88	73.13
White, laces, and stocks, . . . . .	299.34	301.30	76.56	67.75
Wine goods, . . . . .	295.29	297.60	63.30	66.51
Woolen goods, . . . . .	292.16	297.23	85.05	82.99
Woolen goods and yarn, . . . . .	292.00	297.25	87.76	85.27
Woolly, waste, etc., . . . . .	296.53	296.53	72.36	72.32
Worsted goods, . . . . .	285.36	301.96	81.35	79.42
ALL INDUSTRIES, . . . . .	293.28	293.12	70.08	68.39

*Analysis.*

In the table on pages 357 and 358 the number of days in operation is shown, together with the average proportion of business done.

In computing the proportion of business done, maximum production, that is to say the greatest amount of goods which could be turned out without increasing existing facilities, is considered as 100 per cent. It is not, of course, expected that all of the establishments in any given industry should be run to full capacity. The variations from 100 per cent, therefore, indicate, in a general way, how much more could be done with the manufacturing establishments of Massachusetts, if business conditions warranted.

The following table brings forward the figures for proportion of business done for the nine leading industries, for other industries, and for All Industries :

INDUSTRIES.	AVERAGE PROPORTION OF BUSINESS DONE		INCREASE (+) OR DECREASE (−) IN 1904	
	1903	1904	Proportion	Percentages
Boots and shoes (aggregate), . . . . .	69.95	69.75	−0.20	−0.29
Factory product, . . . . .	70.30	68.89	−1.41	−2.01
Soles, heels, and cut stock, . . . . .	70.85	71.84	+0.99	+1.40
Findings, . . . . .	65.27	70.00	+4.73	+7.25
Stitching, heeling, etc., . . . . .	64.86	65.50	+0.64	+0.99
Carpetings, . . . . .	89.70	79.30	−10.40	−11.59
Cotton goods (aggregate), . . . . .	88.26	79.62	−8.64	−9.79
Woven goods, . . . . .	89.25	79.60	−9.65	−10.81
Yarn and thread, . . . . .	86.04	80.33	−5.71	−6.64
Waste, . . . . .	79.29	77.14	−2.15	−2.71
Leather, . . . . .	69.67	72.96	+3.29	+4.72
Machines and machinery, . . . . .	70.63	65.31	−5.32	−7.53
Metals and metallic goods, . . . . .	69.54	67.06	−2.48	−3.57
Paper, . . . . .	87.04	88.17	+1.13	+1.30
Woolen goods (aggregate), . . . . .	85.05	82.99	−2.06	−2.42
Woven goods and yarn, . . . . .	87.76	85.27	−2.49	−2.84
Shoddy, waste, etc., . . . . .	72.36	72.32	−0.04	−0.06
Worsted goods, . . . . .	81.35	79.42	−1.93	−2.37
Nine industries, . . . . .	73.69	71.37	−2.32	−3.15
Other industries, . . . . .	67.46	66.24	−1.22	−1.81
All industries, . . . . .	70.08	68.39	−1.69	−2.41

The industry nearest approaching full capacity in 1903 is that of Carpetings, in which the average proportion of business done reached 89.70 per cent. For 1904 it appears in Paper, the proportion of business done being carried to 88.17 per cent of the full productive capacity of the works in that year.

A study of the figures in the preceding table brings out again the fact that the establishments were not only not run to full capacity during the year 1904, but that they fell below the level reached in 1903. In only two instances in the nine leading industries does greater proportion of business done for 1904 than for 1903 appear, namely, Leather, the percentages being 72.96 and 69.67, respectively; and Paper, the proportion being 87.04 in 1903 as against 88.17 in 1904. The decline in Cotton Goods was from 88.26 to 79.62 per cent; in Carpetings, from 89.70 to 79.30 per cent; and in Machines and Machinery, from 70.63 to 65.31 per cent. Decreases are also shown for Boots and Shoes, of 0.29 per cent; Metals and Metallic Goods, of 3.57 per cent; Woollen Goods, of 2.42 per cent; and Worsteds, of 2.37 per cent.

In the nine leading industries, in the aggregate, the proportion of business done was 73.69 per cent in 1903 and 71.37 per cent in 1904, a decline of 3.15 per cent in the latter year. For industries other than the nine, the proportion reached 67.46 per cent of full capacity in 1903 as against 66.24 per cent in 1904. For All Industries, the proportion of business done was 70.08 per cent in 1903 and 68.39 per cent in 1904, a decrease in the latter year of 2.41 per cent.

In the first two columns of the presentation on pages 357 and 358 the average number of days in operation is given for each industry and for All Industries. As stated in the headnote to the table, the figures are based upon persons employed, the average number of persons employed in each establishment being multiplied by the number of days that particular establishment was operated, so that, in the final averages given for each industry and for All Industries, the elements of time and persons have been given due weight in arriving at the average working time per employee.

The following table brings forward data for the nine leading industries, for other industries, and for All Industries:



INDUSTRIES.	AVERAGE NUMBER OF DAYS IN OPERATION		INCREASE (+) OR DECREASE (-) IN 1904	
	1903	1904	Days	Percentages
Boots and shoes (aggregate), . . . . .	294.16	295.20	+1.04	+0.35
Factory product, . . . . .	293.76*	295.04	+1.28	+0.44
Soles, heels, and cut stock, . . . . .	298.19	295.93	-2.26	-0.76
Findings, . . . . .	295.49	296.38	+0.89	+0.30
Stitching, heeling, etc., . . . . .	298.64	302.42	+3.78	+1.27
Carpetings, . . . . .	303.63	290.20	-13.43	-4.42
Cotton goods (aggregate), . . . . .	290.51	279.66	-10.85	-3.73
Woven goods, . . . . .	288.90	277.47	-11.43	-3.96
Yarn and thread, . . . . .	301.67	294.64	-7.03	-2.33
Waste, . . . . .	305.71	304.56	-1.15	-0.38
Leather, . . . . .	298.46	300.39	+1.93	+0.65
Machines and machinery, . . . . .	298.24	300.59	+2.35	+0.79
Metals and metallic goods, . . . . .	297.04	303.38	+6.34	+2.13
Paper, . . . . .	284.88	294.12	+9.24	+3.24
Woolen goods (aggregate), . . . . .	292.16	297.23	+5.07	+1.74
Woven goods and yarn, . . . . .	292.00	297.25	+5.25	+1.80
Shoddy, waste, etc., . . . . .	296.53	296.53	*=	*=
Worsted goods, . . . . .	285.36	301.96	+16.60	+5.82
Nine industries, . . . . .	292.82	292.08	-0.74	-0.25
Other industries, . . . . .	294.11	294.92	+0.81	+0.28
All industries, . . . . .	293.28	293.12	-0.16	-0.05

\* No change.

The average number of working days for 1904, omitting 52 Sundays and seven holidays, was 306. Of the nine leading industries, the one nearest approaching full time in 1903 was Carpetings, the establishments running on an average 303.63 days. In 1904, it appears for Metals and Metallic Goods, the establishments running on an average 303.38 days.

In Boots and Shoes, the average working time was 294.16 days in 1903 as against 295.20 in 1904, an increase of 1.04 days, or 0.35 per cent. Slight increase also appears for Leather, the number of days in operation in 1903 being 298.46, as against 300.39 in 1904. In Machines and Machinery, the number of days in operation in 1903 was 298.24 and in 1904, 300.59, a gain of 2.35 days, or 0.79 per cent. In Metals and Metallic Goods the gain amounted to 6.34 days, or 2.13 per cent; in Paper, 9.24 days, or 3.24 per cent; in Woolen Goods, 5.07 days, or 1.74 per cent, and in Worsted Goods, 16.60 days, or 5.82 per cent.

The industries showing decrease in running time are Carpetings, in which the establishments ran on an average 303.63 days in 1903 as against 290.20 days in 1904, a decrease of 13.43 days, or 4.42 per cent; and Cotton Goods, the number

of days declining from 290.51 in 1903 to 279.66 in 1904, a loss of 10.85 days, or 3.73 per cent.

For the nine leading industries in the aggregate, a slight decrease is shown, 292.82 days in 1903 against 292.08 days in 1904, and for All Industries the decline is also fractional, 293.28 days in 1903 and 293.12 days in 1904, a decrease of 0.16 days, or 0.05 per cent. For other industries, in the aggregate, a slight increase appears, 294.11 days in 1903 and 294.92 days in 1904, a gain of 0.81 days, or 0.28 per cent.

In regard to time in operation, it should perhaps be stated that the form of inquiry upon the schedule for the Census did not provide for reporting part time as it appears upon the annual blank. It is therefore probable that the working time for 1904 has been, in some instances, somewhat overstated, only those days being considered idle when the factory was actually shut down either from lack of work or for the purpose of making repairs.

## General Summary of Industrial Conditions.

The following table, drawn from the several presentations, reproduces the facts for All Industries :

CLASSIFICATION.	1903	1904	INCREASE (+) OR DECREASE (—) IN 1904	
			Amounts	Percent- ages
Number of establishments considered, .	4,730	4,730	—	—
Number of private firms, . . . . .	3,085	2,997	—88	—2.85
Number of corporations, . . . . .	1,489	1,572	+83	+5.57
Number of industrial combinations, .	20	20	*=	*=
Number of partners, . . . . .	4,777	4,611	—166	—3.47
Males, . . . . .	4,537	4,375	—162	—3.57
Females, . . . . .	179	197	+18	+10.06
Estates, . . . . .	61	39	—22	—36.07
Number of stockholders, . . . . .	56,115	56,053	—62	—0.11
Males, . . . . .	32,222	31,748	—474	—1.47
Females, . . . . .	18,339	18,141	—198	—1.08
Banks, trustees, etc., . . . . .	5,554	6,164	+610	+10.98
Average partners to a private firm, .	1.55	1.54	—0.01	—0.65
Average stockholders to a corporation, .	38.20	36.12	—2.08	—5.45
Capital, . . . . .	\$548,314,237	\$807,433,857	†—	†—
Value of stock used, . . . . .	\$568,141,454	\$570,209,212	+\$2,067,758	+0.36
Value of goods made and work done, .	\$1,006,549,483	\$997,457,634	—\$9,091,849	—0.90
Persons employed :				
Average number, . . . . .	445,569	433,383	—12,186	—2.73
Smallest number, . . . . .	376,921	367,685	—9,236	—2.45
Greatest number, . . . . .	500,213	496,114	—4,099	—0.82
Excess of greatest over smallest, .	123,292	128,429	+5,137	+4.17
Total amount paid in wages, . . . .	\$210,093,834	\$202,582,249	—\$7,511,585	—3.58
Average proportion of business done, .	70.08	68.39	—1.69	—2.41
Average number of days in operation, .	293.28	293.12	—0.16	—0.05

\* No change.

† Not comparable. Figures in 1904 taken on a different basis from those of 1903. See pages 318 and 319, *ante*.

It will be remembered that returns were received from 4,730 identical establishments in 1903 and 1904. An examination of the figures shows that in almost all the elements surrounding production percentages of decrease are shown. The decrease which appears in number of private firms and the increase in the number of corporations are reciprocal, since the number of establishments remains the same for both years, the apparent discrepancy in number of establishments being due to changes of management, as explained on page 314. The decrease in the total number of partners and in the number of stockholders indicates the tendency towards concentrating the management of establishments into fewer hands.

In the cost value of stock used in the 4,730 establishments, increase appears, in the year 1904 as compared with 1903, of \$2,067,758, or 0.36 per cent. In value of goods made a decrease of 0.90 per cent is shown.

Decrease is also shown in average number of persons employed of 2.73 per cent, in smallest number of persons employed of 2.45 per cent, and in greatest number of persons employed of 0.82 per cent, while the range of unemployment was wider than in 1903 by 5,137 persons, or 4.17 per cent. In total amount paid in wages a decrease of 3.58 per cent appears; in average proportion of business done the decrease amounted to 2.41 per cent; and in average number of days in operation decrease of 0.05 per cent is shown. The following table brings out in a graphic manner the facts for the nine leading industries for 1904 as compared with 1903:

INDUSTRIES.	INCREASE (+) OR DECREASE (−) IN 1904 AS COMPARED WITH 1903 IN —				
	Product	Persons Employed	Wages	Days	Proportion
Boots and shoes, . . . . .	+	−	+	+	−
Carpetings, . . . . .	−	−	−	−	−
Cotton goods, . . . . .	−	−	−	−	−
Leather, . . . . .	−	+	+	+	+
Machines and machinery, . . . . .	−	−	−	+	−
Metals and metallic goods, . . . . .	−	−	−	+	−
Paper, . . . . .	+	+	+	+	+
Woolen goods, . . . . .	−	−	−	+	−
Worsted goods, . . . . .	+	−	−	+	−

As will be noted from the signs in the above table, Paper is the only industry which exhibits increase in all of the elements considered, namely, value of product, number of persons employed, total amount paid in wages, number of days in operation, and proportion of business done.

In two of the nine leading industries, namely, Carpetings and Cotton Goods, decrease in each of the five elements considered is shown. Machines and Machinery, Metals and Metallic Goods, and Woolen Goods show decrease as compared with 1903 in value of product, in number of persons employed, in total amount paid in wages, and in proportion of business done, the only element in which increase appears being number of days in operation. Boots and Shoes shows increase in value of product, in total amount paid in wages, and



in number of days in operation, and decrease in the other two points, namely, persons employed and proportion of business done. Leather exhibits increase in all of the elements considered except value of product, and Worsted Goods shows increase in value of product and in number of days in operation, and decrease in persons employed, wages paid, and proportion of business done.

In order to show the relation of wages, industry product, and the profit and minor expense fund to the selling value of goods produced, the following series of tables is given, the first relating to Boots and Shoes :

*Boots and Shoes.* [Comparison for 656 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$159,983,193	\$165,709,642
Value of stock used and other materials consumed in production, . .	\$100,737,707	\$103,916,188
Industry product (gross product less value of stock and materials), .	\$59,245,486	\$61,793,454
Wages (labor's direct share of product), . . . . .	\$34,498,626	\$34,586,282
Profit and minor expense fund (industry product less wages), . . .	\$24,746,860	\$27,207,172
Percentage of industry product paid in wages, . . . . .	58.23	55.97
Percentage of industry product devoted to profit and minor expenses, .	41.77	44.03

The industry product, shown in the third line of the above table, represents the result of the productive forces of the industry. That is to say, it is the value created above the cost of stock and materials by the union of labor and capital. In the division of the proceeds of each industry, part is paid to the labor force in the form of wages and the remainder constitutes a fund from which are paid freights, insurance, interest on loans (credit capital), interest on stock (fixed or invested capital), rents, commissions, salaries, etc., and profits, if any. The balance of the industry product, therefore, after the deduction of the amount paid in wages becomes a "Profit and Minor Expense Fund," and is shown in the fifth line of the table.

In Boots and Shoes, the percentage of the industry product paid in wages was 58.23 in 1903 as against 55.97 in 1904, and the percentage devoted to profit and minor expenses, which is the complement of the percentage paid in wages, rose from 41.77 in 1903 to 44.03 in 1904.

The data for Carpetings follow :

*Carpetings.* [Comparison for 10 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$11,209,336	\$9,654,392
Value of stock used and other materials consumed in production, . .	\$6,844,167	\$6,818,838
Industry product (gross product less value of stock and materials), .	\$4,365,169	\$2,835,554
Wages (labor's direct share of product), . . . . .	\$2,238,164	\$2,021,859
Profit and minor expense fund (industry product less wages), . . .	\$2,127,005	\$813,695
Percentage of industry product paid in wages, . . . . .	51.27	71.30
Percentage of industry product devoted to profit and minor expenses,	48.73	28.70

The percentage of industry product paid in wages in 1903 was 51.27 as against 71.30 in 1904, while the percentage of industry product devoted to profit and minor expenses, which was 48.73 in 1903, dropped to 28.70 in 1904.

For Cotton Goods we have the following figures :

*Cotton Goods.* [Comparison for 166 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$134,741,484	\$132,564,840
Value of stock used and other materials consumed in production, . .	\$78,274,573	\$82,407,903
Industry product (gross product less value of stock and materials), .	\$56,466,911	\$50,156,937
Wages (labor's direct share of product), . . . . .	\$37,105,519	\$32,267,548
Profit and minor expense fund (industry product less wages), . . .	\$19,361,392	\$17,889,389
Percentage of industry product paid in wages, . . . . .	65.71	64.33
Percentage of industry product devoted to profit and minor expenses,	34.29	35.67

The industry product shown for Cotton Goods for 1903 was \$56,466,911 as against \$50,156,937 in 1904, and of this industry product a slightly smaller percentage was paid in wages in 1904 than in 1903, the figures being, respectively, 64.33 and 65.71, leaving the percentages devoted to profit and minor expenses as 34.29 in 1903 and 35.67 in 1904.

The next table relates to Leather.

*Leather.* [Comparison for 105 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$29,719,280	\$29,228,192
Value of stock used and other materials consumed in production, . .	\$20,846,121	\$20,548,240
Industry product (gross product less value of stock and materials), .	\$8,873,159	\$8,679,952
Wages (labor's direct share of product), . . . . .	\$3,597,466	\$3,842,277
Profit and minor expense fund (industry product less wages), . . .	\$5,275,693	\$4,837,675
Percentage of industry product paid in wages, . . . . .	40.54	44.27
Percentage of industry product devoted to profit and minor expenses,	59.46	55.73

Eliminating the cost of stock, we have an industry product for 1903 of \$8,873,159, falling in 1904 to \$8,679,952. Of these amounts, respectively, 40.54 per cent was paid to labor in 1903 and 44.27 per cent in 1904. The percentage of industry product devoted to profit and minor expenses fell from 59.46 per cent in 1903 to 55.73 per cent in 1904.

A similar table is shown for Machines and Machinery.

*Machines and Machinery.* [Comparison for 375 Establishments]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$58,484,782	\$51,942,230
Value of stock used and other materials consumed in production, .	\$22,952,922	\$20,240,029
Industry product (gross product less value of stock and materials),	\$35,531,860	\$31,702,201
Wages (labor's direct share of product), . . . . .	\$18,721,781	\$17,139,626
Profit and minor expense fund (industry product less wages), . .	\$16,810,079	\$14,562,575
Percentage of industry product paid in wages, . . . . .	52.69	54.06
Percentage of industry product devoted to profit and minor expenses,	47.31	45.94

In this industry, the industry product dropped from \$35,531,860 in 1903 to \$31,702,201 in 1904, and a larger proportion of this amount was paid to labor in 1904 than in 1903, the percentages being 54.06 and 52.69, respectively, leaving a slightly smaller percentage for profit and minor expenses, the proportion being 45.94 in 1904 as against 47.31 in the earlier year.

The next table relates to Metals and Metallic Goods.

*Metals and Metallic Goods.* [Comparison for 393 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$49,207,591	\$44,760,700
Value of stock used and other materials consumed in production, .	\$26,017,516	\$21,771,869
Industry product (gross product less value of stock and materials),	\$23,190,075	\$22,988,831
Wages (labor's direct share of product), . . . . .	\$13,257,588	\$11,704,292
Profit and minor expense fund (industry product less wages), . .	\$9,932,487	\$11,284,539
Percentage of industry product paid in wages, . . . . .	57.17	50.91
Percentage of industry product devoted to profit and minor expenses,	42.83	49.09

As in Machines and Machinery, a smaller industry product appears in 1904 than in 1903. Of this industry product, 57.17 per cent was paid in the form of wages in 1903 as against 50.91 per cent in 1904. A somewhat larger percentage was devoted

to profit and minor expenses in 1904, 49.09 per cent in that year as against 42.83 per cent in 1903.

The next comparison is for Paper.

*Paper.* [Comparison for 81 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$30,202,100	\$31,921,767
Value of stock used and other materials consumed in production, . .	\$16,953,773	\$17,737,702
Industry product (gross product less value of stock and materials), .	\$13,248,327	\$14,184,065
Wages (labor's direct share of product), . . . . .	\$5,104,929	\$5,450,723
Profit and minor expense fund (industry product less wages), . .	\$8,143,398	\$8,733,342
Percentage of industry product paid in wages, . . . . .	38.53	38.43
Percentage of industry product devoted to profit and minor expenses, .	61.47	61.57

In this industry, the conditions were slightly better in 1904 than in 1903, increased product and greater amount paid in wages occurring at the same time. The industry product for 1903 was \$13,248,327 and \$14,184,065 in 1904. Of these amounts, respectively, 38.53 per cent was paid in wages in 1903, and 38.43 per cent in 1904. The proportions devoted to profit and minor expenses do not materially differ, the percentages for 1903 and 1904 being 61.47 and 61.57, respectively.

The next table is for Woolen Goods.

*Woolen Goods.* [Comparison for 160 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$56,893,318	\$54,501,657
Value of stock used and other materials consumed in production, . .	\$31,975,672	\$32,439,770
Industry product (gross product less value of stock and materials), .	\$24,917,646	\$22,061,887
Wages (labor's direct share of product), . . . . .	\$11,264,047	\$11,003,103
Profit and minor expense fund (industry product less wages), . .	\$13,653,599	\$11,058,784
Percentage of industry product paid in wages, . . . . .	45.21	49.87
Percentage of industry product devoted to profit and minor expenses, .	54.79	50.13

In this industry, from the standpoint of the employees, the conditions were somewhat better in 1904 than in 1903, the amounts disbursed in wages forming 49.87 per cent of the industry product as against 45.21 per cent in 1903. This leaves a correspondingly smaller amount for the purpose of profit and minor expenses, the percentage falling from 54.79 in 1903 to 50.13 in 1904.

The final table brings together the data for Worsteds Goods.



*Worsted Goods.* [Comparison for 43 Establishments.]

CLASSIFICATION.	1903	1904
Value of goods made and work done (gross product), . . . . .	\$46,032,840	\$46,426,816
Value of stock used and other materials consumed in production, .	\$26,763,110	\$30,668,362
Industry product (gross product less value of stock and materials), .	\$19,269,730	\$15,758,454
Wages (labor's direct share of product), . . . . .	\$7,354,201	\$7,291,478
Profit and minor expense fund (industry product less wages), . . .	\$11,915,529	\$8,466,976
Percentage of industry product paid in wages, . . . . .	38.16	46.27
Percentage of industry product devoted to profit and minor expenses, .	61.84	53.73

As in Woolen Goods, a somewhat larger percentage of the industry product was paid in wages in 1904 than in 1903, the proportions being 46.27 per cent and 38.16 per cent, respectively, while a corresponding decrease appears in the amount devoted to profit and minor expenses, the percentage being 53.73 in 1904 as against 61.84 in 1903.

As has already been stated, the results obtained from these annual abstracts are indicative of the condition of the industries in the State as a whole, and upon the increase or decrease in value of product for 1904 as shown in the 4,730 establishments considered in this volume, we have estimated the total value of goods made in the various industries of the State. The approximations given in the table which follows, therefore, are such as might be obtained from a complete Census.

*Estimated Value of Goods Made and Work Done — 1904.*

INDUSTRIES.	VALUE OF GOODS MADE AND WORK DONE
Agricultural implements, . . . . .	\$1,697,186
Arms and ammunition, . . . . .	5,470,063
Artisans' tools, . . . . .	4,924,691
Awnings, sails, tents, etc., . . . . .	822,314
Bicycles, tricycles, etc., . . . . .	2,033,505
Boots and shoes, . . . . .	192,407,047
Boxes, barrels, kegs, etc., . . . . .	7,760,958
Boxes (paper), . . . . .	3,450,194
Brick, tiles, and sewer pipe, . . . . .	1,386,462
Brooms, brushes, and mops, . . . . .	2,650,575
Building, . . . . .	82,845,619
Building materials, . . . . .	2,804,319
Burial cases, caskets, coffins, etc., . . . . .	943,490
Buttons and dress trimmings, . . . . .	1,389,316
Carpetings, . . . . .	10,659,542
Carriages and wagons, . . . . .	10,054,229
Cement, kaolin, lime, and plaster, . . . . .	707,110
Chemical preparations (compounded), . . . . .	2,594,768
Clocks and watches, . . . . .	3,652,722
Clothing, . . . . .	54,387,677
Cooking, lighting, and heating apparatus, . . . . .	6,422,969
Cordage and twine, . . . . .	14,578,597
Cotton goods, . . . . .	130,073,285
Crayons, pencils, crucibles, etc., . . . . .	135,620

*Estimated Value of Goods Made and Work Done — 1904 — Concluded.*

INDUSTRIES.	VALUE OF GOODS MADE AND WORK DONE
Drugs and medicines, . . . . .	\$6,501,942
Dyestuffs, . . . . .	671,219
Earthen, plaster, and stone ware, . . . . .	589,770
Electrical apparatus and appliances, . . . . .	15,136,159
Electroplating, . . . . .	432,118
Emery and sand paper and cloth, etc., . . . . .	1,411,785
Fancy articles, etc., . . . . .	1,184,542
Fertilizers, . . . . .	2,247,315
Fine arts and taxidermy, . . . . .	45,390
Fireworks and matches, . . . . .	203,396
Flax, hemp, and jute goods, . . . . .	7,123,878
Food preparations, . . . . .	101,011,643
Furniture, . . . . .	21,015,584
Gas and residual products, . . . . .	10,369,284
Glass, . . . . .	435,284
Glue, isinglass, and starch, . . . . .	2,211,007
Hair work (animal and human), . . . . .	339,375
Hose and belting: rubber, linen, etc., . . . . .	685,794
Hosiery and knit goods, . . . . .	9,581,777
Ink, mucilage, and paste, . . . . .	728,714
Ivory, bone, shell, and horn goods, etc., . . . . .	3,776,875
Jewelry, . . . . .	10,733,058
Leather, . . . . .	29,358,537
Leather goods, . . . . .	4,030,813
Liquors (bottled) and carbonated beverages, . . . . .	2,415,154
Liquors (malt), . . . . .	10,690,922
Liquors (distilled), . . . . .	2,643,910
Lumber, . . . . .	5,601,686
Machines and machinery, . . . . .	59,758,975
Metals and metallic goods, . . . . .	54,603,322
Models, lasts, and patterns, . . . . .	1,639,275
Musical instruments and materials, . . . . .	7,727,358
Oils and illuminating fluids, . . . . .	2,221,789
Paints, colors, and crude chemicals, . . . . .	1,819,368
Paper, . . . . .	29,022,930
Paper goods, . . . . .	10,147,702
Photographs and photographic materials, . . . . .	2,158,949
Polishes and dressing, . . . . .	3,125,832
Printing, publishing, and bookbinding, . . . . .	30,420,985
Print works, dye works, and bleacheries, . . . . .	25,577,936
Railroad construction and equipment, . . . . .	7,127,624
Rubber and elastic goods, . . . . .	43,993,711
Saddlery and harness, . . . . .	1,572,598
Scientific instruments and appliances, . . . . .	2,871,638
Shipbuilding, . . . . .	2,886,951
Silk and silk goods, . . . . .	6,361,687
Sporting and athletic goods, . . . . .	1,148,549
Stone, . . . . .	6,312,357
Straw and palm leaf goods, . . . . .	6,554,263
Tallow, candles, soap, and grease, . . . . .	5,521,395
Tobacco, snuff, and cigars, . . . . .	6,371,399
Toys and games (children's), . . . . .	894,463
Trunks and valises, . . . . .	275,143
Whips, lashes, and stocks, . . . . .	1,892,309
Wooden goods, . . . . .	3,784,093
Woolen goods, . . . . .	52,365,976
Worsted goods, . . . . .	49,591,239
Other industries, . . . . .	8,984,569
ALL INDUSTRIES, . . . . .	\$1,231,764,574

In the figure for All Industries, \$1,231,764,574, are included what are known as the neighborhood industries, such as carpentering, painting, and the other branches of Building; blacksmithing; dressmaking; shoe repairing; etc., which establishments have always been canvassed in taking a complete Census, but which, if strictly manufacturing industries are considered, should be eliminated from the returns.

### Condensed Statements.

Owing to co-operation this year with the Federal Government on account of the Census, the reports from manufacturers were much delayed and the work of tabulation unusually retarded, but the returns received from 4,730 identical establishments in the years 1903 and 1904 permit the following condensed general statements:

#### STOCK AND MATERIALS USED.

*The increase in stock and materials used in 1904 as compared with 1903 for All Industries amounted to 0.36 per cent. Increases appear in five of the nine leading industries as follows: Boots and Shoes, 3.16 per cent; Cotton Goods, 5.28 per cent; Paper, 4.62 per cent; Woolen Goods, 1.45 per cent, and Worsted Goods, 14.59 per cent. The other four leading industries exhibit decreases as follows: Carpetings, 0.37 per cent; Leather, 1.43 per cent; Machines and Machinery, 11.82 per cent, and Metals and Metallic Goods, 16.32 per cent. The value of stock and materials used in these nine leading industries represents 59.02 per cent of the entire value of stock and materials used in All Industries as returned for the year 1904.*

#### GOODS MADE.

*The aggregate value of goods made and work done, as shown in the 4,730 establishments, dropped from \$1,006,549,483 in 1903 to \$997,457,634 in 1904, a decline in the latter year, due to business depression, of 0.90 per cent. Only*

*three of the nine leading industries show increase in value of goods made in 1904 as compared with 1903. The gain in each instance is very slight, amounting to but 3.58 per cent in Boots and Shoes, 5.69 per cent in Paper, and 0.86 per cent in Worsted Goods. The other six leading industries exhibit decreases as follows: Carpetings, 13.87 per cent; Cotton Goods, 1.62 per cent; Leather, 1.65 per cent; Machines and Machinery, 11.19 per cent; Metals and Metallic Goods, 9.04 per cent; and Woolen Goods, 4.20 per cent. The value of goods made in the nine leading industries represented 56.82 per cent of the entire output of the 4,730 establishments considered in All Industries for 1904.*

#### PERSONS EMPLOYED.

*The decrease shown for average number of persons employed in 1904 as compared with 1903 was 2.73 per cent. The greatest number of persons employed shows a decrease of 0.82 per cent, and the smallest number of persons employed a decrease of 2.45 per cent. The range of unemployment was wider in 1904 than in 1903 by 5,137 persons, or 4.17 per cent. In seven of the nine leading industries decreases in average number of persons employed are shown as follows: Boots and Shoes, 0.16; Carpetings, 5.69 per cent; Cotton Goods, 6.50 per cent; Machines and Machinery, 9.14 per cent; Metals and Metallic Goods, 10.88 per cent; Woolen Goods, 1.80 per cent, and Worsted Goods, 2.89 per cent. The two industries showing increase in average number of persons employed are Leather and Paper, the percentages of increase being, respectively, 6.88 and 5.27.*

#### WAGES PAID.

*The decrease in total amount paid in wages in 1904 as compared with 1903 for All Industries was \$7,511,585, or 3.58 per cent. In the nine leading industries the following decreases appear: Carpetings, 9.66 per cent; Cotton Goods, 13.04 per cent; Machines and Machinery, 8.45 per cent; Metals and Metallic Goods, 11.72 per cent; Woolen Goods, 2.32 per cent, and Worsted Goods, 0.85 per cent. Three of the nine lead-*



*ing industries show increases, they are: Boots and Shoes 0.25 per cent; Leather, 6.81 per cent; and Paper, 6.77 per cent.*

#### AVERAGE YEARLY EARNINGS.

*The average yearly earnings, without regard to sex or age, in 1904 were \$467.44 as against \$471.52 in 1903, a decrease of \$4.08, or 0.87 per cent. The range from highest to lowest in 1904 was \$875.45 in Liquors (Malt) to \$313.61 in Brooms, Brushes, and Mops. For the nine leading industries, decreases are shown as follows: Carpetings, 4.22 per cent; Cotton Goods, 6.99 per cent; Leather, 0.07 per cent; Metals and Metallic Goods, 0.94 per cent, and Woolen Goods, 0.52 per cent. The industries showing increase in average yearly earnings are Boots and Shoes, 0.41 per cent; Machines and Machinery, 0.76 per cent; Paper, 1.43 per cent; and Worsted Goods, 2.09 per cent.*

#### WORKING TIME AND PROPORTION OF BUSINESS DONE.

*The employees worked, on an average, 293.28 days in 1903 and 293.12 days in 1904, a decrease of 0.05 per cent. The average proportion of business done by each establishment was 70.08 per cent in 1903, falling in 1904 to 68.39 per cent, a decrease in the latter year of 2.41 per cent.*



# CONTENTS.

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## STATISTICS OF MANUFACTURES. 1903, 1904.

	Page
INTRODUCTION, . . . . .	305-308
ESTABLISHMENTS AND THEIR MANAGEMENT, . . . . .	309-317
Number of establishments considered since 1886, . . . . .	309
Private firms and corporations: by industries. 1903, 1904, . . . . .	310, 311
Partners and stockholders: by industries. 1903, 1904, . . . . .	312, 313
Analysis, . . . . .	314-317
INVESTMENT, MATERIALS USED, AND PRODUCT, . . . . .	318-329
Capital invested: by industries. 1903, 1904, . . . . .	320, 321
Stock used: by industries. 1903, 1904, . . . . .	322, 323
Goods made: by industries. 1903, 1904, . . . . .	324, 325
Analysis, . . . . .	326-329
LABOR AND ITS COMPENSATION, . . . . .	330-355
Average number of persons employed — both sexes: by industries. 1903, 1904, . . . . .	331, 332
Smallest, greatest, and average number of persons employed: by industries. 1903, 1904, . . . . .	333, 334
Range of employment and unemployment: by industries. 1903, 1904, . . . . .	335, 336
Persons employed — both sexes. Aggregates, by months. 1903, 1904, . . . . .	337-339
Wages paid: by industries. 1903, 1904, . . . . .	340, 341
Average yearly earnings: by industries. 1903, 1904, . . . . .	342, 343
Classified weekly wages: by selected industries. 1903, 1904, . . . . .	344-346
Analysis, . . . . .	347-355
WORKING TIME AND PROPORTION OF BUSINESS DONE, . . . . .	356-362
Days in operation and proportion of business done: by industries. 1903, 1904, . . . . .	357, 358
Analysis, . . . . .	359-362
GENERAL SUMMARY OF INDUSTRIAL CONDITIONS, . . . . .	363-373
Data relating to the 4,730 establishments considered in All Industries, . . . . .	363, 364
Industry product and profit and minor expense fund, . . . . .	365-369
Estimated aggregate value of goods made and work done for the year 1904, . . . . .	369, 371
Condensed general statements regarding the years 1903 and 1904, . . . . .	371-373

# PUBLICATIONS OF THE BUREAU OF STATISTICS OF LABOR.

The following issues of the annual reports of this Department remain in print and will be forwarded when requested, upon receipt of the price set against each Part and bound volume.

## **Annual Report on the Statistics of Labor.**

**1893.** Bound in cloth, postage 15 cents. This report contains a special report on Unemployment, and Labor Chronology for the year 1893; this latter will be mailed separately for 5 cents.

**1894.** Bound in cloth, postage 15 cents. Contains, I. Compensation in Certain Occupations of Graduates of Colleges for Women (postage 5 c.); II. Distribution of Wealth (postage 10 c.); III. Labor Chronology for 1894 (postage 5 c.).

**1895.** Bound in cloth, postage 25 cents. Contains, I. Relation of the Liquor Traffic to Pauperism, Crime, and Insanity; II. Graded Weekly Wages, 1810-1891, first part (postage 10 c.); III. Labor Chronology for 1895 (postage 5 c.).

**1896.** Bound in cloth, postage 15 cents. Contains, I. Social and Industrial Changes in the County of Barnstable (postage 5 c.); II. Graded Weekly Wages, 1810-1891, second part (postage 10 c.); III. Labor Chronology for 1896 (postage 5 c.).

**1897.** Bound in cloth, postage 15 cents. Contains, I. Comparative Wages and Prices, 1800-1897 (postage 5 c.); II. Graded Weekly Wages, 1810-1891, third part (postage 10 c.); III. Labor Chronology for 1897 (postage 5 c.).

**1898.** Bound in cloth, postage 25 cents. Contains, I. Sunday Labor (postage 5 c.); II. Graded Weekly Wages, 1810-1891, fourth part (postage 15 c.); III. Labor Chronology for 1898 (postage 5 c.).

**1899.** Bound in cloth, postage 15 cents. Contains, I. Changes in Conducting Retail Trade in Boston Since 1874 (postage 5 c.); II. Labor Chronology for 1899 (postage 10 c.).

**1900.** Bound in cloth, postage 25 cents. Contains, I. Population of Massachusetts in 1900; II. The Insurance of Workingmen (postage 10 c.); III. Graded Prices, 1816-1891 (postage 15 c.).

**1901.** Bound in cloth, postage 15 cents. Contains, I. Labor Chronology for 1900 (postage 5 c.); II. Labor Chronology for 1901 (postage 5 c.); III. Prices and Cost of Living, 1872-1902 (postage 5 c.); IV. Labor Laws (postage 5 c.).

**1902.** Bound in cloth, postage 15 cents. Contains, I. Report to the Legislature; II. Labor Chronology for 1902; III. Mercantile Wages and Salaries (postage 5 c.); IV. Sex in Industry (postage 5 c.).

**1903.** Bound in cloth, postage 15 cents.

Contains, I. Race in Industry (postage 5 c.); II. Free Employment Offices in the United States and Foreign Countries (postage 5 c.); III. Social and Industrial Condition of the Negro in Massachusetts (postage 5 c.); IV. Labor and Industrial Chronology for 1903 (postage 5 c.).

**1904.** Bound in cloth, postage 15 cents. Contains, I. Actual Weekly Earnings (postage 5 c.); II. Causes of High Prices (postage 5 c.); III. Labor and Industrial Chronology for 1904 (postage 5 c.).

## **Annual Report on the Statistics of Manufactures.**

Publication begun in 1886, but all volumes previous to 1892 are now out of print. Each volume contains comparisons, for identical establishments, between two or more years as to Capital Devoted to Production, Goods Made and Work Done, Stock and Materials Used, Persons Employed, Wages Paid, Time in Operation, and Proportion of Business Done. The Industrial Chronology which forms a Part of each report up to and including the year 1902 presents an Industrial Chronology by Towns and Industries. Beginning with the year 1903, the Industrial Chronology is combined with that for Labor under the title of Labor and Industrial Chronology and forms a part of the Annual Report on the Statistics of Labor. Beginning with the year 1904, the Annual Report on the Statistics of Manufactures has been discontinued as a separate volume and now forms a part of the Report on Labor.

The volumes now remaining in print are given below, the figures in parentheses indicating the amount of postage needed to secure them:

**1892** (15 c.); **1893** (15 c.); **1894** (15 c.); **1895** (15 c.); **1896** (10 c.); **1897** (10 c.); **1898** (15 c.), contains also a historical report on the Textile Industries; **1899** (10 c.); **1900** (10 c.); **1901** (10 c.), contains also a five year comparison on Manufactures, 1895-1900; **1902** (10 c.); **1903** (10 c.).

## **Special Reports.**

A Manual of Distributive Co-operation — 1885 (postage 5 c.).

Reports of the Annual Convention of the National Association of Officials of Bureaus of Labor Statistics in America — 1902, 1903, and 1904 (postage 5 cents each).



# PUBLICATIONS OF THE BUREAU OF STATISTICS OF LABOR.

## Labor Bulletins.

These Bulletins contain a large variety of interesting and pertinent matter on the Social and Industrial Condition of the Workingman, together with leading articles on the Condition of Employment, Earnings, etc. The following numbers are the only ones now remaining in print and will be forwarded upon receipt of five cents each to cover the cost of postage.

**No. 14, May, 1900.** Free Public Employment Offices—Employment and Unemployment in the Boot and Shoe and Paper Industries—Legislation affecting Hours of Labor—Quarterly Review of Employment and Earnings: Ending April 30, 1900—Statistical Abstracts.

**No. 15, August, 1900.** Household Expenses—Comparative Occupation Statistics for the Cities of Fall River, New Bedford, and Taunton—List of Subjects pertaining to Labor considered in the Latest Reports of American Statistical Bureaus—Massachusetts Labor Legislation in 1900—Quarterly Review of Employment and Earnings: Ending July 30, 1900.

**No. 24, November, 1902.** Review of Employment and Earnings for six months ending October 31, 1902—Quarterly Record of Strikes—Classes Occupied in Massachusetts Manufactures—Labor Organizations in Massachusetts.

**No. 29, January, 1904.** Eight-hour Day—Licensing of Barbers—Early Closing and Half-holiday Laws of Australasia—Industrial Studies, Proprietors—Palaces for the People—Quarterly Record of Strikes.

**No. 30, March, 1904.** National Trades Association—Massachusetts-born Living in Other States—Industrial Betterments—A Partial Religious Canvass of Boston—Current Comment on Labor Questions: Child Labor—Bi-monthly Record of Strikes and Lockouts—Prices of Certain Articles of Food in Toronto, Canada, and Massachusetts—Industrial Agreements—Labor Legislation in Other States and Foreign Countries—Recent Legal Labor Decisions—Statistical Abstracts.

**No. 31, May, 1904.** City Labor in Massachusetts—Review of Employment and Earnings for Six Months ending April 30, 1904—Average Retail Prices in 17 Cities—Bi-monthly Record of Strikes and Lockouts—Editorial, Rev. Jesse H. Jones—Industrial Agreements—Current Comment on Labor Questions: Open and Closed Shop—Labor Legislation in Other States and Foreign Countries—Recent Legal Labor Decisions—Excerpts Relating to Labor, Industrial, Sociological, and General Matters of Public Interest—Statistical Abstracts.

**No. 32, July, 1904.** Child Labor in

the United States and Massachusetts—Net Profits of Labor and Capital—The Inheritance Tax—Absence after Pay Day—Pay of Navy Yard Workmen—Labor Legislation in Massachusetts for 1904—Industrial Agreements—Current Comment on Labor Questions: Eight-hour Workday—Recent Legal Labor Decisions—Excerpts Relating to Labor, Industrial, Sociological, and General Matters of Public Interest—Statistical Abstracts.

**No. 34, December, 1904.** Increases in the Cost of Production—Review of Employment and Earnings for Six Months ending October 31, 1904—Semi-annual Record of Strikes and Lockouts: Ending October 31, 1904—Strike of Cotton Operatives in Fall River—Average Retail Prices, April and October, 1904—Absence after Pay Day, No. 2—Current Comment on Labor Questions: Co-operation—Recent Legal Labor Decisions—Industrial Agreements—Excerpts Relating to Labor, Industrial, Sociological, and General Matters of Public Interest—Statistical Abstracts—Index to Labor Bulletins of the year 1904, Nos. 29 to 34, inclusive.

**No. 35, March, 1905.** Wage Earner and Education, The—Free Employment Offices—Current Comment on Labor Questions: Trade Schools and Manual Training Schools—Legislation Regulating and Prohibiting the Employment of Women and Children in the United States—Bulletins of Bureaus of Labor—Recent Legal Labor Decisions—Industrial Agreements—Excerpts Relating to Labor, Industrial, Sociological, and General Matters of Public Interest—Statistical Abstracts.

**No. 36, June, 1905.** Tramps and Vagrants. Census of 1905—The Loom System—Weekly Day of Rest—Wages and Hours of Labor on Public Works—The Census Enumerators of 1905—Average Retail Prices, October and April—Semi-annual Record of Strikes and Lockouts: Six Months ending April 30, 1905—Labor Legislation in Massachusetts for 1905—Current Comment on Labor Questions: Profit Sharing—Industrial Agreements—Recent Legal Labor Decisions—Excerpts Relating to Labor, Industrial, Sociological, and General Matters of Public Interest—Statistical Abstracts.

**No. 37, September, 1905.** The Work of the Bureau—Earnings of Cotton-mill Operatives—Old-age Pensions—Industrial Agreements—Recent Legal Labor Decisions—Excerpts Relating to Labor, Industrial, Sociological, and General Matters of Public Interest—Current Comment on Labor Questions: Bakers' Ten-hour Law Unconstitutional—Statistical Abstracts—Trade Union Directory of Massachusetts for 1905.

